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THE BRITISH ENVIRONMENTAL MOVEMENT: THE DEVELOPMENT OF AN ENVIRONMENTAL CONSCIOUSNESS AND ENVIRONMENTAL ACTIVISM, 19451975

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THE BRITISH ENVIRONMENTAL MOVEMENT: THE DEVELOPMENT OF AN ENVIRONMENTAL CONSCIOUSNESS AND ENVIRONMENTAL ACTIVISM, 19451975

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ABSTRACT

This work investigates the development of an environmental consciousness and environmental activism in Britain, 1945-1975. The 1970s have been described as 'the decade of the environment' and was the period when the modern environmental movement emerged. In this thesis, the environmental movement is considered to be a broad network of individuals and pressure groups engaging in collective action with shared environmental beliefs. Much of the work on the movement has ignored or played down the importance of the post-war period on its development. This project challenges that, dealing less with the movement itself and more with the developments which led to its emergence: through analysing events like the great London smog of 1952 and the *Torrey Canyon* oil spill of 1967, as well as through television programmes, this thesis traces the post-war influences of the movement and the growth of environmental awareness.

Environmental pressure groups form part of the movement and a number of them are studied here, such as the Newcastle-based group Save Our City from Environmental Mess and the London-based group Commitment, WWF, Friends of the Earth and the National Smoke Abatement Society. From analysing the resources of these groups and the political processes within which they appear (resource mobilisation theory and political process theory) a better understanding is made about their successes, failures and how they fed into a growing environmental awareness. Television programmes from the 1950s, 1960s and 1970s – notably natural history programmes such as *Look*, *Zoo Quest*, *Doctor Who* and *Doomwatch* – also helped an environmental consciousness develop. In marrying together these different issues, this work provides an original contribution to knowledge, and assesses some of the influences which led to the environmental movement emerging in 1970s Britain.

CONTENTS

Abstract	2			
Table of Contents	3			
Acknowledgements	4			
Author's Declaration	5			
List of Abbreviations	6 - 7			
Chapter 1 – Introduction	8 - 44			
Chapter 2 – Nature Conservation and Pollution in Britain, c.194 the great London smog to the Council for Nature	5-1959: From 45 - 112			
Chapter 3 – The Council for Nature, 'SOS Rhino,' 'the nun of nature,' and NERC: the evolution of conservation issues in Britain, 1960-c.1965 113 - 169				
Chapter 4 – Cow Green, the 'Battle of the Holiday Coast' and the Conservation Society: from conservationism to environmentalism, c.1965-1969				
Chapter 5 – From awareness to activism: the British Environme Movement, 1970-1975	ental 232 - 307			
Chapter 6 – Conclusion	308 - 323			
Appendix	324			
Bibliography	325 - 349			

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Library and archive staff are often overworked and underpaid, and yet you provided me with support and guidance on particular sources or collections. It is appreciated. As well as these, the Inter-Library Loans team at Northumbria University deserve some thanks for their patience and understanding with my many ILL requests and queries. LSE Library also allowed me to print the poster in Chapter 2. Thank you for that.

Those interviewed for this project also merit some thanks; whilst I have not used all the interviews conducted, I am grateful for everything you all said, often helping in fill in gaps which otherwise would be left unfilled.

I should finish by paraphrasing a quote from Pierce Hawthorne, a character from NBC's *Community* – without you all 'I wouldn't even be here.' Thank you.

Author's Declaration

I declare that the work contained in this thesis has not been submitted for any other award and that it is all my own work. I also confirm that this work fully acknowledges opinions, ideas and contributions from the work of others.

Any ethical clearance for the research presented in this thesis has been approved.

Approval has been sought and granted by the University Ethics Committee on 17

January 2012.

I declare that the Word Count of this Thesis is 82,331 words

Name:			
Signature:			
Date:			

ABBREVIATIONS

BBC – British Broadcasting Corporation

CND - Campaign for Nuclear Disarmament

CUL - Cambridge University Library

DCL - Durham Clayport Library

DDT - dichlorodiphenyltrichloroethane

ECY – European Conservation Year

FoE - Friends of the Earth

ICI – Imperial Chemical Industries

ITV - Independent Television

IUCN – International Union for the Conservation of Nature and Natural Resources

LSE Library - London School of Economics and Political Science Library

MP - Member of Parliament

MRC - Modern Record Centre

NC – the Nature Conservancy

NERC - Natural Environment Research Council

NHS – National Health Service

NIMBY - Not In My Backyard

NRIC - Nature Reserves Investigation Committee

NSAS - National Smoke Abatement Society

PPT - Political Process Theory

RMT – Resource Mobilisation Theory

RSPCA – Royal Society for the Prevention of Cruelty to Animals

RTZ – Rio Tinto Zinc

SCA – Sheffield City Archives

SOC'EM - Save Our City from Environmental Mess

SSSOCCC - Stop Spadina, Save Our City Co-ordinating Committee

TA – Teesside Archives

TDC - Teesdale Defence Committee

TEC – Tyneside Environmental Concern

THC - The Herbert Centre

TNA - the National Archives

TWA – Tyne and Wear Archives

UN - United Nations

WAC - BBC Written Archive Centre

WWF – World Wildlife Fund (today it is known as the World Wide Fund for Nature)

Chapter 1 – Introduction

On 30 September 1969, Prime Minister Harold Wilson took to the stage and delivered a speech to the Labour Party Conference in Brighton. He set out the issues which were to be of concern to British society in the following decade:

First, our environment. There is a two-fold task: to remove the scars of 19th century capitalism - the derelict mills, the spoil heaps, the back-to-back houses that still disfigure so large a part of our land. At the same time we have to make sure that the second industrial revolution through which we are now passing does not bequeath a similar legacy to future generations. We must deal with the problems of pollution - of the air, of the sea, of our rivers and beaches. We must also deal with the uniquely 20th century problems of noise and congestion which will increasingly disturb, unless checked, our urban life.¹

This was the first time the environment had been mentioned in a conference speech and set the tone of the 1970s, the so-called 'decade of the environment,' when environmental concerns moved to the centre of British society.² This project focuses not so much on that decade but on the years preceding it, assessing the development of an environmental consciousness in post-war Britain.³ By doing so, this work seeks to shed new light on the post-war development of the environmental movement in Britain – a movement which emerged in the 1970s but

¹ Harold Wilson, Labour Party Conference Speech, Brighton, 1969 – http://www.britishpoliticalspeech.org/speech-archive.htm?speech=167 – accessed electronically 18 March 2014. Wilson mentioned the environment for the first time in this speech. See also John McCormick, *The Global Environmental Movement: Reclaiming Paradise* (London: Belhaven Press, 1989), p. 129.

² See John Barr, 'Environment Lobby', *New Society*, 384 (5 February 1970), p. 210. President Richard Nixon defined the 1970s as the environmental decade in a speech in 1970. See Glen Sussman & Bryon W. Daynes, 'Spanning the Century: Theodore Roosevelt, Franklin Roosevelt, Richard Nixon, Bill Clinton, and the Environment', in *White House Studies Compendium, Volume 4*, edited by Robert W. Watson (New York: Nova Science Publishers, Inc.), p. 308.

³ Perhaps the closest work which covers the whole period from an environmental activist/consciousness point of view is by Meredith Veldman, *Fantasy, the Bomb and the Greening of Britain: Romantic Protest, 1945-1980* (Cambridge: Cambridge University Press, 1994). However she does not discuss the environmental movement per se and focuses more on literature and romantic ideas. She also includes analysis of the Campaign for Nuclear Disarmament and similar protest movements which were not overtly environmental.

which was influenced by thinking and environmental concern in the post-war period.⁴

It may be useful at this point to clarify some of the terminology used below: over the following pages the term 'environment' is used to mean the non-human world. This includes plants and animals. The word 'environment' itself is an example of the success of the mistreatment of the world. Eldon Griffiths, in a House of Commons Debate, described the environment thus: 'By "the environment" we mean not only the countryside and our incomparable coastal scenery: we mean, and we must mean, the air we breathe, the water we drink and wash with and, not least, our urban environment. '6

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⁴ Duncan Watts divides the development of environmental ideas into different phases: the preservationist attitudes of the nineteenth century, which saw groups such as the National Trust appear. The inter-war period say amenity concern in urban and rural areas, with CPRE and the Ramblers' Association launching. Then post-war conservationist ideas. He does not distinguish between the environmentalism of the late 1960s and later more radical 'dark green' ideas. In a similar fashion, Peter Rawcliffe also divides this development into phases: the preservationist nineteenth century; the early twentieth century and interwar years; and then post-war ideas which grew in the 1960s and 1970s. See Duncan Watts, The Environment and British Politics (London: Hodder & Stoughton, 1999), p. 3; Peter Rawcliffe, Environmental Pressure Groups in Transition (Manchester: Manchester University Press, 1998), pp. 16-17. See also Grant Jordan & William Maloney, The Protest Business? Mobilising Campaign Groups (Manchester: Manchester University Press, 1997), p. 11. In describing the differences between 1970s and 1990s environmental idea, Robert Paehlke claims that 1970s environmentalism was 'sometimes naïve in its willingness to reject prosperity as the source of all environmental evils, forgetting that the dislocations associated with declines in prosperity were not likely to be distributed in socially benign ways,' whereas the 1990s view 'seeks win-win solutions' - Robert Paehlke, 'Economic Growth and the Environment', in Conservation and Environmentalism: An Encyclopaedia, edited by Robert Paehlke (London: Routledge, 1995), p. 200. See also Christopher Rootes, 'Environmental NGOs and the Environmental Movement in England', in NGOs in Contemporary Britain: Non-state Actors in Society and Politics Since 1945, edited by Nick Crowson, Matthew Hilton & James McKay (London: Palgrave Macmillan, 2009), p. 219. Rootes describes different types of groups - environmental and ecological groups - which exist today. In addition, David Peterson del Mar briefly comments on this issue – see Peterson del Mar, Environmentalism (London: Pearson, 2006), p. 128.

⁵ See Watts, *The Environment and British Politics*, p. 1. As Langdon Winner argues, environment 'means, literally, "something that surrounds." It suggests that what previous generations had thought of as a target for domination ... is now something that we have moved into and taken over.' See Langdon Winner, *The Whale and the Reactor: A Search for Limits in an Age of High Technology* (London: University of Chicago Press, 1986), p. 123. ⁶ Eldon Griffiths, House of Commons Debate, 'Environmental Pollution', 21 July 1970, vol 804 cc286-396 – http://hansard.millbanksystems.com/commons/1970/jul/21/environmental-pollution#S5CV0804P0_19700721_HOC_404 – accessed electronically 27 September 2013.

Although today the environment is perhaps the most important political issue across the world, there is surprisingly little which has been written by historians about the development of post-war environmental concern in Britain. Not only do the few existing studies which currently exist lack any detailed case analysis of the post-war influences on the 1970s environmental movement, but the issues they discuss are largely individual ones. By seeking to analyse the post-war development of an environmental consciousness, which led to the emergence of the environmental movement in the 1970s, this work is a significant original contribution to the historiography of post-war Britain and British environmental history.

7

⁷ The US Senate Majority Leader Harry Reid described to reporters in March 2014 how climate change as "the worst problem facing the world today." See Kate Sheppard, 'Harry Reid: "Climate Change is the Worst Problem Facing the World Today", Huffington Post, 6 March 2014 - http://www.huffingtonpost.com/2014/03/06/harry-reid-climatechange n 4914683.html - accessed electronically 26 March 2014. Much of what has been written about the post-war environment has come from political scientists and sociologists. See Christopher Rootes, (ed.), Environmental Protest in Western Europe (Oxford: Oxford University Press, 2003); Rootes, 'Britain', in Environmental Protest in Western Europe, edited by Christopher Rootes (Oxford: Oxford University Press, 2003), pp. 20-58; Rootes, 'Introduction', in Environmental Protest in Western Europe, edited by Rootes, pp. 1-19; Rootes, 'Environmental Movements: From the Local to the Global', Environmental Politics, 8:1 (1999), pp. 1-12. Also see also McCormick, The Global Environmental Movement, Michael Cahill, The Environmental and Social Policy (London: Routledge, 2002), p. 8; Kenneth Hanf & Alf-Inge Jansen, 'Environmental policy – the outcome of strategic action and institutional characteristics', in Governance and Environment in Western Europe: Politics, Policy and Administration, edited by Kenneth Hanf & Alf-Inge Jansen (Harlow, Essex: Longman, 1998), pp. 1-16.

⁸ Historians of post-war Britain have tended to shy away from discussing environmental issues in detail – they either ignore them entirely or relegate them to a couple of pages only. In the 2013 work Reassessing 1970s Britain, although describing the malady of the 1970s and using four examples to describe the period as one when "social panic" gripped the nation, there is no mention of the environment at all. This is despite the fact that in the early 1970s, television series such as *Doomwatch* reflected this panic in a very real way, as did the books Limits to Growth and 'A Blueprint for Survival'. Lawrence Black & Hugh Pemberton, 'Introduction: The benighted decade? Reassessing the 1970s', in Reassessing 1970s Britain, edited by Lawrence Black, Hugh Pemberton & Pat Thane (Manchester: Manchester University Press, 2013), pp. 9-14. Other historians of post-war Britain who do mention the environment have often relegated it to a brief mention over a couple of pages. One scholar guilty of this is Dominic Sandbrook, White Heat: A History of Britain in the Swinging Sixties (London: Little, Brown, 2006), pp. 600-603. His work on 1950s Britain makes no mention of anything environmental/conservation related. Sandbrook, Never Had it So Good: A History of Britain from Suez to the Beatles (London: Little, Brown, 2005). Andy Beckett has written on Britain in the 1970s and he does mention the environment, although only in the context of that decade - Andy Beckett, When the Lights Went Out: Britain in the Seventies (London: Faber & Faber, 2009), pp. 136-137, 234-243. Historian Alwyn Turner also briefly mentions the environment in the context of the 1970s. See Turner, Crisis? What Crisis? Britain in the 1970s (London: Aurum, 2008), p. 57.

The phrase 'environmental consciousness' is used throughout this work and simply means environmental awareness; the two are used interchangeably here. It is perceived as awareness of conservation issues, the destruction of the natural world, pollution and wildlife extinction, expressed in a multitude of ways. It can include something as simple as watching a television programme about nature or joining an environmental pressure group to someone explaining how and why they love nature or part of nature. T.C. Smout describes it as, at its fullest, a respect for species not of our own and a love for the beauty of all things. It includes a sense that the environment is important and needs protecting. How far is consciousness – or awareness – measurable? These are abstract terms and measuring them in an absolute fashion is not feasible. 10

What this work seeks to show is that in Britain over the period in question, environmental awareness became more widespread, more engrained in society. Although there is no absolute set of indicators, as this work reveals, this awareness can be observed through case studies, a number of which appear in this project. 'Environmental issues,' John Dryzek claims, 'do not present themselves to us in well-defined boxes labelled radiation, national park, pandas, coral reefs, rainforest, heavy metal pollution, and the like. Instead, they are interconnected in all kinds of ways.' This is the significance of the examples in this work, helping the reader to appreciate the interconnectedness of different issues, but also allowing the reader to understand how environmental ideas grew over time.

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⁹ T.C. Smout, *Exploring Environmental History: Selected Essays* (Edinburgh: Edinburgh University Press, 2011), pp. 217-218.

¹⁰ Although about India, P. Harju-Autti's article from 2013 does discuss in general about measuring environmental awareness. See P. Harju-Autti, 'Measuring Environmental Awareness in Nineteen States in India', *University Journal of Environmental Research and Technology*, 3:5 (2013), p. 544.

¹¹ John S. Dryzek, *The Politics of the Earth: Environmental Discourses* (Oxford: Oxford University Press, 1997), p. 7.

By focusing on the post-war period, analysing some of the post-war issues which triggered a growth in environmental awareness, and demonstrating the correlation between what might initially appear to be disparate attitudes towards environmental problems, this study provides a greater comprehension of the British environmental movement of the 1970s. It widens the understanding of the movement's development by approaching it from a hitherto underexplored way. For instance, several of the issues which were of concern in the immediate postwar period – air pollution and nature conservation in particular – coalesced in the later 1960s, with new pressure groups adopting a more inclusive set of beliefs.

It cannot be said that in 1945 no one was interested in the environment and that by 1970 everyone was; it does not work like that. Even though the environment, by 1970, had become "more topical than sex," as this project aims to reveal, environmental awareness increased gradually over time. ¹² In Britain, the awakening of environmental ideas and the development of the environmental movement can be viewed as moving through several phases before reaching maturity, which can be described as – preservationism, conservationism and environmentalism. Although this thesis focuses on the later phases in the period 1945-1975, it does not seek to claim that popular concern for the environment suddenly emerged out of nowhere in 1945 at the end of the war.

Early concern for the natural world existed in the nineteenth century with opposition to railway construction in the Lake District and witnessed the establishing of organisations such as the National Trust, represented by preservationist attitudes towards the environment.¹³ Preservationism often

¹² This quote was made by a Nature Conservancy representative, quoted in John Barr, 'Environment Lobby', p. 209

^{&#}x27;Environment Lobby', p. 209.

13 Many poets, artists and other luminaries were involved with nineteenth century preservationism. On poets, artists & environmentalism see Michael Wheeler (ed.), *Ruskin*

embodies ideas about leaving areas untouched or retaining the status quo of the natural environment. The inter-war period was characterised by the emergence of new pressure groups, concerned with ideas about the right to roam and protecting or conserving the countryside from urbanisation; these included the Ramblers' Association and the Campaign to Protect Rural England (CPRE, then known as the Council for the Preservation of Rural England).

Another phase in the growth of environmental concern developed during the post-war period. A number of new but important considerations set this period apart from previous years – technological advances in the form of new media such as television, which could be used in getting messages to a vast number of people; a number of environmental disasters which provided evidence to the public of the devastation of the natural world; and consumerism, which advanced both people's awareness and the tools of destruction with regard to the environment.14

This period saw destruction of the environment on a scale not seen since the Industrial Revolution. With this destruction came new awareness and concern about the natural world. The post-Second World War period was distinctive; 1945 did not merely mark the end of a war which had destroyed much of the natural

and Environment: The Storm-Cloud of the Nineteenth Century (Manchester: Manchester University Press, 1995). See also Jonathan Bate, The Song of the Earth (London: Picador, 2001) for a general account of poetry, literature and the environment. For William Morris and his environmental beliefs see Peter C. Gould, Early Green Politics: Back to Nature, Back to the Land, & Socialism in Britain, 1880-1900 (Sussex: Harvester Press, 1988); William Morris, News from Nowhere, or, An Epoch of Rest: Being some chapters from a Utopian Romance (Maryland: Wildside Press, 2007), originally published in 1890; Stephen Coleman & Paddy O'Sullivan (eds), William Morris & News from Nowhere: A Vision for Our Time (Devon: Green Books, 1990), especially Paddy O'Sullivan, 'The Ending of the Journey: William Morris, News from Nowhere & Ecology', in William Morris & News from Nowhere, edited by Coleman & O'Sullivan, pp. 169-183. For late nineteenth-century environmental beliefs see James Winter, Secure from Rash Assault: Sustaining the Victorian Environment (Berkeley: University of California Press, 1999); Harriet Ritvo, The Dawn of Green: Manchester, Thirlmere & Modern Environmentalism (London: University of Chicago Press, 2009), pp. 3, 178, See also Ramachandra Guha, Environmentalism: A Global History (London: Longman, 2000), pp. 3-16.

John Sheail, An Environmental History of Twentieth Century Britain, (London: Palgrave, 2002), pp. 257, 262-263.

environment in Britain. It also saw optimistic ideas of a 'brave new world' emerge, the birth of a new era with the 'implementation of universal, collectivist welfare' and a more focused concern for environmental problems.¹⁵ It was in this period that conservationism really took hold, with its proponents seeking 'to conserve the environment as a resource for human beings to enjoy and accordingly emphasised the protection and conservation of flora, fauna and different wildlife habitats.'¹⁶ Conservationism differs from preservationism in that the adherents to the former sometimes compromise environmental protection for some economic opportunity, whilst those of the latter tend not to advocate any such compromise.¹⁷

Gradually, as environmental ideas began to influence more people and an environmental consciousness grew in society, the general public became increasingly alarmed about 'the catastrophic London smog of 1952, the deteriorating conditions of many rivers, and the ... indiscriminate use of pesticides.' The destruction of the environment, and attitudes towards nature, and more general concerns about standards of living also changed after the war, setting this period apart from earlier years. The lives lost and sacrifices made during the Second World War, forced people to reassess social priorities. As the welfare state was born, and quality of life improved in post-war Britain, society had more to engage with and think about in relation to nature in various guises, whether through watching a nature conservation television programme, giving money to a pressure group like the World Wildlife Fund, or visiting national parks.

¹⁵ David Evans, *A History of Nature Conservation in Britain* (London: Routledge, 1992), p. 93; James McKay & Matthew Hilton, 'Introduction', in *NGOs in Contemporary Britain: Non-state Actors in Society and Politics Since 1945*, edited by in Nick Crowson, Matthew Hilton & James McKay (London: Palgrave Macmillan, 2009), p. 4.

¹⁶ Holger Nehring, 'The Growth of Social Movements', in *A Companion to Contemporary Britain, 1939-2000*, edited by Paul Addison & Harriet Jones (Oxford: Blackwell Publishing, 2005), pp. 395-396.

¹⁷ Paehlke, 'Economic Growth and the Environment', pp. 199-200.

¹⁸ Rootes, 'Environmental NGOs and the Environmental Movement in England', p. 207.

By the mid-1960s, environmental ideas shifted from a human-centred concept into a more inclusive bio-centric approach. This was a period when ownership of many household items such as fridges, washing-machines, even cars, became commonplace. The reduction in working hours to five days a week meant that people had time, money and the means to travel, allowing them to visit national parks and the countryside. People 'now wished to escape, if only for a weekend or two, from their everyday milieu of factory or farm, city or suburb.

Nature, whether in the form of forests to walk through, beaches to swim from, or mountains to climb' became a way to escape civilisation. Even subconsciously, people's experience of nature helped to develop the emerging environmental awareness as people experienced wildlife and nature in its natural habitat.

It was during this shift in focus that environmental ideas progressed into a more inclusive environmental concern, in the form of environmentalism (that is not to say that conservation as a term ceased to exist in 1970; in some areas it is still used today). Conservationism – political or social action in defence of the natural environment – was more human focused: its aims were to conserve the environment as a resource that humans could enjoy and as such stressed protection of flora, fauna and different wildlife habitats. Environmentalism, however, is more bio-centric, considering how all living things are connected and emphasised human co-existence with, rather than domination of, nature. It encompassed a whole philosophy addressing not only the natural world but social

¹⁹ Matthew Hilton, *Consumerism in 20th Century Britain* (Cambridge: Cambridge University Press, 2003), pp. 3-4, 309. See also Veldman, *Fantasy, the Bomb and the Greening of Britain*, pp. 4-5. Guha, *Environmentalism: A Global History*, pp. 80-82 (quote appears on p. 82).

²⁰ The World Wildlife Fund (WWF), today known as the World Wide Fund for Nature, still uses the term 'conservation' on their website:

http://wwf.panda.org/what_we_do/how_we_work/key_initiatives/ – accessed electronically 30 January 2014.

Nehring, 'The Growth of Social Movements', pp. 395-396. Lincoln Allison, *Environmental Planning: A Political and Philosophical Analysis* (London: George Allan and Unwin Ltd, 1975), p. 115.

and political factors.²² By this stage conditions were favourable for the emergence of the environmental pressure groups of the 1970s, which often embraced all living organisms as being connected, stressing that humans should learn to coexist with nature:

For example, the Conservation Society was formed in 1966 in the belief that without an attack on the fundamental problems of economic and population growth, individual problems such as pollution, and the threat to the urban and rural environment, were insoluble and the efforts of the more specialist societies irrelevant. There is increasing recognition by other organisations, however, that this view is worthy of consideration. At their annual conference in 1972, members of the CPRE for example strongly supported a resolution calling for the Government to introduce measures to stabilise the existing population level.²³

A 'broad wave of ... mass opinion reacting against the conventional maltreatment and degradation of the environment' appeared at the end of the 1960s, with the emergence of environmentalism.²⁴ By 1975, over 25 years of environmental legislation had been passed by various British governments, and much of the natural world had been protected by law. Although some of this legislation was at times difficult to implement effectively, the breadth of its scope demonstrates 'the growing concern of government for all aspects of the "quality of life" and protection of the natural world in all its forms.²⁵ Not only did a further phase of the

²² Anne Davis, 'Are you an environmentalist or a conservationist', *The Examiner*, 21 September 2009 – http://www.examiner.com/article/are-you-an-environmentalist-or-aconservationist – accessed electronically 24 February 2014. According to the *Oxford English Dictionary*, the term 'environmentalism' was first used in 1966 in *The Washington Post*: 'Environmentalism', *Oxford English Dictionary* (Online Edition) – http://www.oed.com/view/Entry/63091?redirectedFrom=environmentalism#eid – accessed electronically 27 January 2014. Nehring, 'The Growth of Social Movements', pp. 389-390, 395-396.

²³ S.K. Brookes & J.J. Richardson, 'The Environmental Lobby in Britain', *Parliamentary Affairs*, 28 (March 1975), p. 313.

Affairs, 28 (March 1975), p. 313.

²⁴ Max Nicholson, *The Environmental Revolution: A Guide to the New Masters of the World* (London: Penguin, 1972), p. 11.

²⁵ The Government legislation included the National Parks and Access to the Countryside

Act, 1949, which created the National Parks System and established the Nature Conservancy; the Countryside Act, 1968, which saw local authorities establish country parks on green land of over 25 acres; and the Nature Conservancy Council Act, 1973, which created the Nature Conservancy Council. Air pollution was abated somewhat with the Clean Air Acts of 1956 and 1968, and river pollution with the Rivers (Prevention of Pollution) Acts of 1951 and 1961. In addition there were specific Acts which sought to protect wildlife: birds

development of environmental ideas occur at the end of the 1970s, with interest in new environmental issues such as acid raid, polychlorinated biphenyls (PCBs), and climate change, but because several of the pressure groups which emerged in the post-war period were concerned with 'quality of life' issues, which had been mostly addressed by 1975 with regard to the natural world, it seems reasonable to end there.26

Some of these 'quality of life' issues are discussed in this work through case studies, selected because they highlight the transition of environmental concerns from conservationism to environmentalism. Case studies are detailed analyses of particular topics in relation to a wider issue, penetrating a particular subject in greater depth. All the studies in this work highlight in some way the change or growth in environmental concern in Britain. These studies represent step-changes in environmental thought; the term 'step-change' meaning a marked change in attitude towards a particular issue. The growth of an environmental consciousness (through step-changes) can be characterised by an increasing public support for environmental issues and the environment moving towards the centre of British society.²⁷ As Peter Rawcliffe considers, the nature of the modern environmental movement can best be understood by focusing on its influences. 28 The case studies in this work do that.

Although criticism is sometimes levelled at case studies, insofar as they only focus on one particular problem, ignoring other important topics, this is somewhat

were protected under the Protection of Birds Act, 1954 & 1967, the Deer Act, 1963, the Conservation of Seals Act, 1970, the Animals Act, 1971, and the Badgers Act, 1973. The Water Resource Act, 1963, and the Conservation of Wild Creatures and Wild Plants Act, 1975, further protected the natural world in Britain. See Chris C. Park, History of the Conservation Movement in Britain (Reading: The Conservation Trust, 1976), pp. 3, 26-29 (quote appears on p. 29).

See Rootes, 'Environmental NGOs and the Environmental Movement in England', pp. 208-214 for discussion of environmental movement after 1970s.

Rawcliffe, Environmental Pressure Groups in Transition, p. 15. ²⁸ *Ibid*, p. 23.

mitigated here, with a range of studies revealing the diverse nature of environmental awareness in post-war Britain, and how it ebbed and flowed over time. ²⁹ The narrative structure to case studies also aids understanding of the reader as studies can make complex issues more comprehensible. ³⁰ As this work is chronological, the structure of the studies helps readers appreciate the immediate issue which is being described – for instance the growth of nature conservation television programmes – as well as how these link to wider issues of the developing environmental consciousness. Because of this, case studies are good at dealing with complex issues as they break down complicated and sometimes difficult issues into understandable pieces, which the reader can then use to better appreciate the issue in question. The case studies here all reveal the growth of environmental awareness in post-war Britain, but describe different ways in which awareness grew and developed. This awareness influenced the environmental movement of the 1970s, and so, studying particular issues of the immediate post-war years gives better interpretation to the 1970s movement. ³¹

Some of the studies focus largely or exclusively on environmental pressure groups, these groups feeding into a growing environmental consciousness, which in turn led to the emergence of the environmental movement in 1970. Political scientist S.E. Finer has objected to the term 'pressure group,' arguing that it implies something will happen if a group's demands are not met. But, as J.J. Richardson and Richard Kimber note, the word 'pressure' does not have to 'be

See John W. Creswell, *Qualitative Inquiry and Research Design: Choosing Among Five Approaches* (London: SAGE, 2013), Third Edition, pp. 97-99; Roy Gregory, *The Price of Amenity: Five Studies in Conservation and Government* (London: Macmillan, 1971), p. xiv.
 See Robert K. Yin, *Case Study Research: Design and Methods* (London: SAGE, 2009), Fourth Edition, pp. 16, 18; Bent Flyvbjerg, 'Case Study', in *The SAGE Handbook of Qualitative Research*, edited by Norman K. Denzin & Yvonna S. Lincoln (London: SAGE Publications, 2011), pp. 301, 306, 311-314; Jacques Hamel, Stéphane Dufour & Dominic Fortin, *Case Study Methods* (London: SAGE Publications, 1993), p. 39.

³¹ Christopher Rootes, 'Environmental Movements', in *The Blackwell Companion to Social Movements*, edited by David A. Snow, Sarah A. Soule & Hanspeter Kriesi (Oxford: Blackwell Publishing, 2004), p. 608.

viewed quite so starkly ... applying a sanction is only one way of exerting pressure. There is a perfectly reasonable sense in which the simple articulation of a demand is equivalent to exerting pressure upon a part of the political system.' ³²

A pressure group is 'an organisation which is not a political party but which seeks to influence government through the political process, in order that it can affect the development of public policy. 33 For instance, one of the aims of the National Smoke Abatement Society (NSAS), analysed in Chapter 2, was to influence the government and ensure that legislation was passed promoting clean air (as well as educate the public about air pollution). The World Wildlife Fund (WWF, Chapter 3) wanted governments to be more conservation-minded in addition to raising money for conservation projects and informing the public about conservation issues.³⁴ The Teesdale Defence Committee (TDC, Chapter 4), established in 1965 to oppose plans to build a reservoir in Teesdale, pressured the government to reject this plan. 35 The Conservation Society (also Chapter 4) sought to inform and encourage society and government to be more environmentallyaware and pass more environmentally-friendly legislation. 36 Groups such as SOC'EM (Save Our City from Environmental Mess), which existed c.1971-c.1981, Commitment, a Young Liberals offshoot (in the early 1970s, these were considered to be to the left of the Labour Party) which was established and active

It comprised of members such as the Botanical Society of the British Isles, as well as members of the public. No known papers pertaining to this pressure group exist, and so

exact membership figures are unknown.

³² Richard Kimber & J.J. Richardson, 'Introduction', in *Pressure Groups in Britain: A Reader*, edited by Richard Kimber & J.J. Richardson (London: J.M. Dent & Sons, Ltd, 1994), p. 1.

³³ Duncan Watts, *Pressure Groups* (Edinburgh: Edinburgh University Press, 2007), p. 13. ³⁴ Whilst membership figures have not been accessed, in part due to the papers for this organisation residing in Switzerland, a definitive figure cannot be provided. However, in the first year, £90,000 was raised (and some supporters of the group might not have been members, but merely donated money). The Wildlife Youth Service had a membership of 60,000 in its first year of operations – see 'Section I – Report', in *The Launching of a New Ark: First Report of the World Wildlife Fund*, edited by Peter Scott (London: Collins, 1965), p.

Membership peaked in the early 1970s at around 8,000, which might seem like a small number, but this was at a time when other environmental organisations were also appearing.

at the beginning of the 1970s, and TEC (Tyneside Environmental Concern), also wanted to influence the government, warning against air pollution emitted from motor vehicles and having broad environmental concerns rather than focusing on one particular issue.³⁷

Two types of pressure groups exist: those considered sectional or private interest groups, and those considered promotional or public interest groups. The former are groups which represent the interest of certain sections of society (for example, professional bodies such as the British Medical Association), whilst the latter are concerned with the promotion of particular causes of ideas.³⁸ Many of the environmental pressure groups included in this work are promotional groups.

Such groups advocate a general cause or idea, with members drawn from a wide variety of backgrounds who share a common concern.³⁹ Promotional groups often operate on more limited resources than sectional groups, are understaffed, have open memberships and are relatively short lived. They are also often less powerful than private interest groups, and flourish in areas such as environmental concern. This is not universally true, however, as observed in this thesis: whilst some, such as the TDC do disappear when they lose their battle to prevent the

³⁷ SOC'EM was founded in c.1971 and survived until c.1981, folding due to lack of money and interest. Initially a NIMBY, concerned with the development of a motorway through Newcastle, it had broader concerns including protecting the city. Commitment was a Young Liberal offshoot which appeared in c.1971 to protest about air pollution. Another demonstration was held in 1973 but after this the group dissolved, as the Young Liberals became less radical. No membership figures exist as the group had a loose membership structure. Derek Wall, 'Snowballs, elves and skimmingtons?: Genealogies of environmental direct action', in Direct Action in British Environmentalism, edited by Benjamin Steel, Matthew Paterson & Brian Doherty (London: Routledge, 2000), p. 82; Interview with Victor Anderson, 3 May 2012. TEC still existed in the early 1980s but is unclear when it folded, though it was likely due to lack of interest. Response to questions sent to Ken Pollock, one of the founders of TEC, received December 2012.

³⁸ Watts, *Pressure Groups*, pp. 29-30; David Simpson, *Pressure Groups* (London: Hodder & Stoughton, 1999), pp. 7-8; Bill Coxall, Pressure Groups in British Politics (Harlow, Essex: Pearson Education, 2001), pp. 4-5; Kimber & Richardson, 'Introduction', p. 1; Timothy O'Riordan, 'Public Interest Environmental Groups in the United States and Britain', Journal of American Studies, 13:3 (1979), pp. 409-411.

³⁹ Watts, *Pressure Groups*, p. 42.

Cow Green reservoir being constructed, others survive after their initial success, such as SOC'EM.

Some groups embody both sectional and promotional interests, with concerns for members but also for wider society. An example of such as group is a NIMBY (not in my backyard) group. NIMBY groups often emerge to prevent a local development from taking place. In Chapter 5, the NIMBY group SOC'EM, based in Newcastle in the 1970s, is examined. This group was primarily concerned with a motorway which was planned to pass through a residential area of the city. SOC'EM's membership comprised of middle class residents of Jesmond, where the motorway was planned to be built, as well as attracting a broader membership base from across the city and surrounding areas. In their protests against the plans, SOC'EM used arguments about air pollution and the effects on the wider environment to make their case. 40 Although many NIMBY groups are short-lived with short-term goals, SOC'EM survived for ten years and, as seen from its mission statement, had far wider aims than simply preventing motorway construction; they wanted to improve the whole city in a sustainable fashion, were committed to social justice, planting more trees and reducing pollution. 41 NIMBY groups are just that – the implied meaning of the term, is that they are local groups

⁴⁰ Indeed J.B. Sanderson, writing about the National Smoke Abatement Society, notes that the general distinction between pressure groups – sectional and promotional – is not always entirely satisfactory. The Society, for example, had largely a promotional aspect to it, concerned with air pollution as it affects everyone, yet part of its composition was sectional, with membership including organisations such as the Gas Council, in whose interest it was to promote smokeless fuels (such as gas). A better distinction, he argues, is that between groups which are the definite and appointed spokesman for a specific section of the community, and one which is primarily concerned with the propagation of attitudes. See J.B. Sanderson, 'The National Smoke Abatement Society and the Clean Air Act (1956)', *Political Studies*, 9:3 (1961), pp. 237-238.

⁴¹ Katie McClymont & Paul O'Hare, "We're not NIMBYs!" Contrasting local protest groups with idealised conceptions of sustainable communities', *Local Environment*, 13:4 (2008), p. 324; See also 'SOC'EM! Mission Statement', SOC'EM Papers, Accession no. 2659, Tyne & Wear Archives (hereafter TWA), Newcastle.

opposed to developments in their local area.⁴² Yet SOC'EM was different insofar as it attracted attention from across the UK and abroad, from Canada and South Africa. Newcastle's relative isolation from the urban metropolis of London makes SOC'EM's international influence doubly important.

In relation to their role in the wider political system, the terms 'insider' and 'outsider' groups can also be applied to pressure groups. Insider groups are those which are viewed with legitimacy by the government. They are seen as being responsible and authoritative. Outsider groups are the opposite – they do not wish or cannot obtain consultative status often with policy-makers. An example of an insider group in this project is the NSAS, which the government viewed in high regard. Conversely, Commitment was an outsider group, not wishing to engage in dialogue with policy-makers, instead demanding change through radical protest. Indeed, Friends of the Earth, whilst nominally supportive, distanced themselves from Commitment's protests so as to be viewed as legitimate by authorities and in schools.

Some pressure groups here can be seen as reactive, appearing in response to a particular issue. WWF was one such group, launched in response to a series of newspaper articles detailing the extinction of African wildlife. The TDC was another, formed in response to the planned construction of Cow Green reservoir. As conservationism morphed into environmentalism, more proactive groups appeared, such as the Conservation Society and, in the 1970s, Friends of the Earth. With the more inclusive nature of environmentalism, as well as a growing

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⁴² See Timothy Gibson for discussion of some analysis of researching NIMBYs – Timothy A. Gibson, 'NIMBY and the Civic Good', *City & Community*, 4:4 (2005), pp. 381-382.

⁴³ Watts, *Pressure Groups*, p. 42.

⁴⁴ This group was founded in the 1920s, before changing its name to the National Society for Clean Air in 1958, representing the change in focus as a result of the Clean Air Act. It attracted members from local authorities, organisations such as the Gas Council, as well as individuals concerned with air pollution.

⁴⁵ Interview with Victor Anderson, 3 May 2012.

awareness of environmental issues in the 1960s, pressure groups increasingly became concerned more with threats to the environment in general, rather than in response to a particular issue. Even SOC'EM, which was a reactionary group against the planned construction of a motorway, had a far wider mission statement than simply opposing this motorway project.

However, pressure groups should not be confused with social movements; although related, the two are different. Social movements have been described as collective endeavours 'to promote change in any direction and by any means.'46 Although today, the term 'social movement' is used as 'a summons to popular action against a wide range of scourges,' there is no one definition of what constitutes a movement.⁴⁷ John Dryzek and others claim they involve 'an association or set of associations organised around a common interest that seeks to influence collective outcomes without obtaining authoritative offices of government.'48 As Charles Tilly and Lesley Wood profess, there is no one owner of the term 'social movement' and people can use it as they wish. Indeed social movements have various definitions, depending on the scholar but many regard social movements as broadly consisting of people coming together – as individuals and as part of groups – to campaign on a particular issue.⁴⁹

Those movements which appeared in the post-war period have been described as 'new social movements.' The designation 'new' is used simply to show the difference between these and earlier movements – the post-war period

⁴⁶ Paul Wilkinson, *Social Movements* (London: Pall Mall, 1971), p. 27; See also Charles Tilly, *From Mobilisation to Revolution* (London: McGraw-Hill Publishing Company, 1978), p. 39

^{39. &}lt;sup>47</sup> Charles Tilly & Lesley J. Wood, *Social Movements: 1768-2008* (London: Paradigm Pictures, 2009), Second Edition, p. 3.

⁴⁸ John S. Dryzek, David Downes, Christian Hunold, David Schlosberg & Hans-Kristian Hernes, *Green States and Social Movements: Environmentalism in the United States, United Kingdom, Germany and Norway* (Oxford: Oxford University Press, 2011), p. 2. ⁴⁹ Tilly & Wood, *Social Movements*, p. 7.

saw more concern about post-material/socially liberal issues such as gay rights, women's rights and the environment, than previously, and also employ techniques which have been previously unavailable, such as using email as a form of mass communication.⁵⁰

There are different ways of studying aspects of social movements. Before the 1970s, collective behaviour was the focus of studying social movements. Supporters argued that it was social conditions within which people lived that made them disheartened, leading them to protest. However, this has since fallen out of favour and from the 1970s onwards two new ways to study them have emerged. Studying the resources of pressure groups and individuals who consider themselves part of a movement is one way, with a focus on group membership, finances and other tools groups use. An alternative method is to focus on wider politics of a period and analyse why groups appear when they do. Groups emerge when the political climate is right for them.

Both approaches, usually defined as resource mobilisation theory (RMT) and political process theory (PPT), have strengths and weaknesses. Proponents of RMT focus on how resources are mobilised within groups rather than why people were aggrieved, as grievances do not automatically lead to protests. They are,

Watts, *Pressure Groups*, p. 9. See also Gemma Edwards, *Social Movements and Protest* (Cambridge: Cambridge University Press, 2014), pp. 118-119. Bill Coxall offers an explanation as to why a new style of pressure group and new concerns emerged in the postwar period: the working class declined, to be replaced by a new middle class (class division, which had been central to earlier campaigns was now no longer the case, and collective solidarity was in decline, replaced by people pursing politics based on gender and the environment, concerned for non-humans rather than class); social and economic conditions changed, with the post-war affluence and increased welfare diminishing traditional arguments of material needs; technological changes such as the growth of mass media meant the public were constantly informed about problems relating to interest topics like the environment; and as trust in politics and political parties declined in the 1970s, more individualist attitudes appeared, replacing the collectivism of earlier decades. See Bill Coxall, *Pressure Groups in British Politics* (Harlow, Essex: Pearson Education, 2001), p. 31. ⁵¹ Edwards, *Social Movements and Protest*, pp. 39-42.

indeed, a constant part of life.⁵² RMT implies all forms of opposition is organised which is certainly not the case. PPT contests this, concentrating on the external environment within which groups operate. Movements only arise in favourable political conditions, and a political environment is favourable for movement development only when it presents evidence to challengers that suggest that the time is right for a challenge; the media has an important role to play within this. 'Media ... are central to people's perception of their environment.' However, political opportunities are a matter of activists' perception – it is how they define the world around them.⁵³

General theories often fail to fully explain movements and one model cannot be used universally to explain all movements or different aspects of them.⁵⁴ For instance, when assessing the success or failure of pressure groups Richard Kimber, J.J. Richardson and Timothy O'Riordan argue this can be done in several ways, from studying both a group's resources and the climate within which it emerges.⁵⁵ Some groups succeed because they use their resources efficiently and apply technical solutions to their arguments. This can include using scientific or expert witnesses to provide a concrete foundation to their concerns.⁵⁶ This was something SOC'EM did successfully when lobbying against the motorway in Newcastle. They employed specialist doctors to describe the effects of air pollution on lungs.⁵⁷ Success can also be achieved if groups expand their definition of what they mean by 'environment'; that is, if they include other issues into their arguments rather than just describing the detrimental effects on the natural

⁵² *Ibid*, pp. 42-45.

⁵³ *Ibid*, pp. 96-97, 109.

⁵⁴ *Ibid*, p. 236.

⁵⁵ Richard Kimber & J.J. Richardson, 'Conclusion: tactics and strategies', in *Campaigning for the Environment*, edited by Kimber & Richardson, pp. 212-219; O'Riordan, 'Public Interest Environmental Groups', pp. 419-426.

Kimber & Richardson, 'Conclusion: tactics and strategies', pp. 212-214.

⁵⁷ Interview with Don Kent, 10 April 2012.

world.⁵⁸ The National Smoke Abatement Society campaigned for many years on the issue of clean air. They not only argued that air pollution damaged the natural world through stunted growth of plants, but also referred to health issues relating to smoke inhalation and the economic benefits of reducing air pollution levels.

Further success can come if they exploit the media.⁵⁹ When the WWF was launched in 1961, it was as a direct result of a series of newspaper articles in *The Observer* which described the fragile state of African wildlife. The *Daily Mirror* ran a special 'shock edition' calling on citizens to donate money to save this wildlife. This proved very popular and successful. In 1971, Friends of the Earth skilfully exploited the media during their bottle campaign, which, whilst unsuccessful, gained them far more publicity than they had anticipated.

Many of the groups which appeared prior to the end of the 1960s did not perceive 'a major, all-embracing environmental crisis,' in the way later groups did; early groups most focused on single-issues, concerned with one particular problem only. ⁶⁰ The studies of pressure groups here also reveal something of a tension between local and national groups. How 'local' were local issues? The motorway plan, through Newcastle which SOC'EM opposed was, on the face of it, an area specific issue – building a motorway through Newcastle would not affect other regions of the country. Yet the response to SOC'EM from both within the UK and internationally reflects this was not merely a local concern, but that similar schemes were planned elsewhere. SOC'EM became a model for motorway opposition. Similarly, Friends of the Earth (FoE), founded in 1971, was a national organisation yet established many local semi-autonomous groups as it was

⁵⁸ Kimber & Richardson, 'Conclusion; tactics and strategies', p. 215.

⁵⁹ *Ibid*, p. 219; O'Riordan, 'Public Interest Environmental Groups', pp. 409-410, 419.

⁶⁰ Veldman, *Fantasy, the Bomb and the Greening of Britain*, p. 210. See also O'Riordan, 'Public Interest Environmental Groups', pp. 418-419.

believed that such groups could deal with local problems better than a national organisation. The inclusivity of environmentalism meant that the mantra of FoE – 'think globally, act locally' – particularly resonated in this period. As noted in Chapter 2, London was not the only British city to experience smog, nor was Britain the only industrial country to suffer with this problem; the telegram from the mayor of Pittsburgh to the mayor of Sheffield on the opening of the Clean Air exhibition in the latter city reflects this. In order to understand how and why ideas evolved, studying specific issues over this period can help to appreciate the concerns which existed in the 1970s. These studies, therefore, offer insight into why the environmental movement emerged when it did and why it was inclusive, and diverse.

Groups can also be successful because of the wider political context within which they operate; by embracing 'change factors' they can also succeed. These are external events which can change the fortunes of a group. As there was a growing dissatisfaction in Britain during the 1960s with the impact of human activity on the natural world, precipitated in part by the dispute over the Cow Green reservoir and the sinking of the *Torrey Canyon*, a group of concerned citizens came together to form a new society to pressure the government and others into being more environmentally aware. This organisation was called the Conservation Society. ⁶³ The NSAS had existed for many years before the 1950s,

⁶¹ Friends of the Earth was launched in 1971 and still exists today. It sought to protect the planet. Membership figures have been difficult to obtain, as those who gave financial support and who nominally supported them, might not have considered themselves members, but nevertheless supported the group. Friends of the Earth's letterhead described the group as being "Committed to conservation, restoration and the rational use of the environment" – see Philip Lowe & Jane Goyder, *Environmental Groups in Politics* (London: George Allen & Unwin, 1983), p. 124.

The telegram is mentioned in the report by the Public Health Department in Sheffield on the Clean Air Campaign. See Sheffield Public Health Department, 'Report on the Clean Air Campaign', December 1959, p. 5, SY11/1 – Clean Air Campaign, 1959, Sheffield City Archives (hereafter SCA), Sheffield.
 Kimber & Richardson, 'Conclusion: tactics and strategies', p. 217; O'Riordan, 'Public

Simber & Richardson, 'Conclusion: tactics and strategies', p. 217; O'Riordan, 'Public Interest Environmental Groups', pp. 409-410.

but only saw its membership and popularity rise dramatically after the great London smog, when conditions were more favourable for it.⁶⁴

The definition of social movements political scientist Christopher Rootes uses is not so different to those professed by others; his concept is essentially an extension of theirs. 65 The environmental movement, according to Rootes, is best conceived as a broad network of individuals, pressure groups and organisations, as well as political parties, the Green Party in particular, who engage in collective action with a shared belief in environmental issues. Both the forms and intensity of concern and action 'may vary considerably from place to place and from time to time.'66 Many definitions of social movements state that they operate outside the boundaries of politics, whilst Rootes includes political parties in his definition and he does so deliberately. Although not applicable everywhere, in Britain, he argues, the Green Party is almost an activist organisation, remote from institutionalised power, with its one Member of Parliament Caroline Lucas, recently being arrested for demonstrating at a fracking protest in Balcombe. ⁶⁷ Whilst, when it was founded in 1973 as PEOPLE, the Green Party was not engaging in protest, it did seek to revolutionise the political process and argued that it had polices which were distinctive in their focus on environmental impact. With its interest in participatory democracy, this was not so different to some pressure groups of the period (such

⁶⁴ J.B. Sanderson describes the increase in newspaper articles sent to the group. See Sanderson, 'The National Smoke Abatement Society', p. 241.

⁶⁵ Christopher Rootes, 'Environmental movements and green parties in western and eastern Europe', in *The International Handbook of Environmental Sociology*, edited by Michael Redclift & Graham Woodgate (Cheltenham: Edward Elgar Publishers, 1997), pp. 324-325. ⁶⁶ *Ibid*, p. 326. Rootes, 'Environmental NGOs and the Environmental movement in England', p. 201.

⁶⁷ Email correspondence with Christopher Rootes, March 2014. See also Caroline Lucas, 'I risked arrest at Balcombe to send the coalition a message on climate change', *The Guardian*, Wednesday 16 October 2013, p. 32 –

http://www.theguardian.com/commentisfree/2013/oct/16/i-risked-arrest-to-send-a-message – accessed electronically 18 March 2014.

as Commitment who, whilst having no formal membership structure, also believed in a similar idea).

An advantage of using his concept, compared with those of others, is that it clearly fits well with a chronological study and focuses attention on the links between individuals and organisations, which is what this project focuses on.

Moreover, this work is not primarily concerned with the environmental movement itself, but instead its development after the Second World War; as such, Rootes' description of networks allows for some discussion of when the movement came into existence and when these networks formed. Sociologist Gemma Edwards also supports Rootes' definition, arguing that social movements comprise of networks. 'These social networks consist of the relationships between organisations and other actors who are [concerned about] ... a specific issue.'68

Pressure groups, then, represent the organisational aspects of the movement. It is only when they begin to work together (network) that a social movement can safely be recognised. Although Rootes does not make clear exactly how much networking, collective action or shared concern is required to constitute a 'movement,' intimating it varies considerably in place and time, he is clear in his mind when a movement emerged in Britain. This was in the early 1970s with Friends of the Earth, and came about at the same time as a shift in the paradigm of environmental ideas.⁶⁹

Other players in the movement include the general public, who are not necessarily members of particular groups, but who nevertheless share some of their values and goals. The Feminist Movement, for instance, comprises of all the

⁶⁸ Edwards, Social Movements and Protest, p. 67.

⁶⁹ Christopher Rootes, 'Environmental Movements', in *The Blackwell Companion to Social Movements*, edited by Snow, Soule & Kriesi, p. 610; Rootes, 'Environmental NGOs and the Environmental Movement in England', pp. 208-209.

women's pressure groups which campaign for the better treatment of women. Invariably, there are groups and individuals who may not agree on issues (such as abortion); some groups might be single-issue groups (such as equal pay campaigners); and adopt a range of tactics from moderates to militants.

Nevertheless, all who consider themselves united by a common desire to promote the interests of women consider themselves part of this movement. However, some change will also come from individuals watching television programmes or reading literature with a feminist perspective, rather than through protest. 'It is possible for a woman to regard herself as part of the feminist movement without belonging to any organisation.'⁷⁰

This is also true of the environmental movement, comprising of individuals and pressure groups which sometimes disagree but are all united by a common desire to protect and promote the interests of the environment. Some individuals who are not members of particular groups but who broadly support protecting the environment would similarly describe themselves as environmentalists. Like feminism, some change will come from watching television programmes, which is why nature conservation programmes have been analysed in this work. These programmes increased the public's awareness of environmental problems.

⁷⁰ Wyn Grant, *Pressure Groups, Politics and Democracy in Britain* (London: Harvester Wheatsheaf, 1995), pp. 5-6, quote appears on p. 6.

Individuals giving money to groups such as Friends of the Earth or the World Wildlife Fund – but were not members and did not engage in protests – might still consider themselves to be part of the environmental movement, whilst not actively engaging in direct action. Writing letters to politicians also reflects this. Members of the public might take it upon themselves to write to elected officials to complain about a particular environmental issue, and so consider themselves belonging to the environmental movement – advocating environmental rights – but not a member of any organisation. Any person professing to support women's issues might very well be called – or call themselves – a feminist. By a similar token, anyone professing strong environmental beliefs might well be considered or consider themselves to be environmentalists, whilst not actively engaged in protest or with pressure groups.

Viewers of *Doomwatch* (Chapter 5), which aired in the early 1970s, noted the realism of this series.⁷²

Today, nature television programmes are extremely popular, evidenced by the number and diversity of programmes produced each year. In the post-war period, television became a dominant part of the public's leisure time which was outstripping radio and newspapers by the 1970s; because television's role so dramatically increased in this period, it is important to consider with respect to the growth of environmental concern in society. As seen through the responses to *Doomwatch*, audiences made connections between what they watched on screen and real life problems. Environmental-themed programmes, which were produced from the 1950s onwards, brought the natural environment into people's homes, leading to a growing concern about the impact of humans on the environment.⁷³

These television programmes are analysed through the ideas of cultural theorist Stuart Hall, who has written about the different ways programmes can be interpreted. Different scenes on television programmes do not themselves signify anything on their own, he argues; it is only when they are combined with other scenes that the message is broadcast. ⁷⁴ In other words, context is important. ⁷⁵ Hall's analysis, a process of 'encoding/decoding' describes the process programmes undergo, from inception to transmission. Producers develop an idea and create a programme, encoding it with their message. This is then aired and decoded in the audience, though not always in the same way as the producers

⁷² Watts, *Pressure Groups*, pp. 6-8.

⁷³ Jack Williams, *Entertaining the Nation: A Social History of British Television* (Stroud: Sutton Publishing Limited, 2004), p. 1.
⁷⁴ Stuart Hall, 'Encoding and Decoding in the Television Discourse', *Centre for*

Contemporary Cultural Studies – Media Series No. 7, September 1975, p. 5.

The Ellen Seiter, Television and New Media Audiences (Oxford: Oxford University Press, 1999), p. 15. David Morley also describes how important context is – see David Morley, 'Changing paradigms in audience studies', in Remote Control: Television, Audiences and Cultural Power, edited by Ellen Seiter, Hans Borchers, Gabriele Kreutzner & Eva-Maria Warth (Oxford: Routledge, 2013), pp. 38-39.

originally intended. 76 Often images used in programmes – for example a photograph of a cow – are interpreted as they should be, by the audience, because they 'look like objects in the real world' and they 'reproduced the conditions of perception in the receiver [viewer].'77

David Morley's survey of different methods of analysing television programmes highlights some problems associated with Hall's method, namely that it does not include language as a purveyor of messages; it sometimes confuses programme messages with those of the broadcasters; and there are some genres which encoding/decoding works better with than others. However, whilst Morley does not himself identify which he uses, and nor does he describe one definitive theory, he nevertheless supports the usefulness of Hall's model for assessing television programmes, as it does not claim either that a programme has a fixed meaning and nor does it claim a programme has no meaning at all. 78 The best way to understand how viewers respond to television programmes, Morley argues, is having them watch programmes and then having them write about how they felt and what they considered the programme to be about, rather than an analyst simply imagining 'the possible implications of how other people might watch television.'79

The Audience Research Reports for *Doomwatch* reveal viewers were conscious of the storylines of the series and the relationship of these to the real world. This was not just a drama series, but audiences understood that many of the issues which the programme dealt with were real, or at least had a real-life

⁷⁶ Hall, 'Encoding and Decoding', p. 4. ⁷⁷ *Ibid*, p. 11.

Morley, 'Changing paradigms in audience studies', p. 18.

⁷⁹ *Ibid*, p. 24.

basis.⁸⁰ As such, in describing the growth of environmental concern, audiences watching this programme made links with and questioned what was happening in their neighbourhoods, in the countryside, and across the country, increasing their awareness of environmental destruction.

Whilst environmental awareness in Britain matured in less measurable ways – such as television programmes slowly placing conservation issues in people's consciousness, observed through the success and popularity of WWF and the National Nature Weeks – disasters such as the smog and the oil spill spurred people to action and raised awareness with quantifiable evidence of the effects on the environment and destruction of the planet. Through Cow Green moreover, people were given further examples of industrial development's destructive effects. These are reflected in the case studies in this work, each describing a particular environmental concern, building to show that by the 1970s, what had been disparate issues – local, national, pollution, conservation – had augmented together into the basis of what can be considered the environmental movement.

The awareness of environmental destruction is the main focus of this work, with this project seeking not to study the environmental movement itself in detail but instead focuses on the influences to that movement which developed in the post-war period. The thesis is not as interested in groups in their own right; rather in their appearance as evidence of the growth and development of environmental concern. The development of this concern in the public's consciousness is the

⁸⁰ *Doomwatch* appeared within a context of anti-technological and anti-science attitudes in the wake of disasters like the *Torrey Canyon*. As such, it was perceived in a particular way, Morley's argument follows, because of the disaster and other issues which created this belief. If an environmental consciousness had not developed over the previous 25 years, for instance, *Doomwatch* would have been received in a different way. Whilst some of the earlier nature conservation television programmes assessed in this work do not have Audience Research Reports like *Doomwatch* does, where Hall's analysis works well is his and Morley's argument about context – these television programmes were received in the context of a growing awareness of nature and programmes like *Look* deliberately tried to change then-held perceptions about the natural world.

main interest here. Pressure groups are part of this, as their establishment often reveals a growing environmental awareness. These groups came together in the 1970s so that the environmental movement – as is understood here, using Rootes' definition – appeared. Disasters such as the London smog and the *Torrey Canyon* represent the ebb and flow and diverse nature of the escalation of environmental awareness in Britain after the Second World War. Yet scholars writing about such events have failed to link them to wider issues in relation to environmental change. William Wise's work, *The Killer Smog*, for example, makes no reference to broader themes of air pollution. Similarly Richard Petrow's *The Black Tide* focuses exclusively on the *Torrey Canyon*, commenting little on its legacy. There are few studies of Cow Green either, despite the fact it has been described as an important subject for the advancement of conservationist ideas, and heralded the first time conservationists and industrialists clashed after the war.⁸¹ Works which do exist on the history of nature conservation in Britain have been approached from a conservation perspective with only brief mention of how conservationism fitted into a wider concept of environmentalism, something which general environmental histories of Britain also ignore.82

⁸¹ See William Wise, *The Killer Smog: The World's Worst Air Pollution Disaster* (Illinois: Rand McNally and Company, 1968); Edward Cowan, Oil and Water: The Torrey Canyon Disaster (London: William Kimber, 1969); Richard Petrow, The Black Tide: In the Wake of the Torrey Canyon (London: Hodder & Stoughton, 1968). One of the few scholars to have included any analysis of Cow Green is Roy Gregory. He discusses this as a case study in his work on amenity issues in Britain. See Chapter 4 of this thesis; also Gregory, The Price of Amenity: Five Studies in Conservation and Government (London: Macmillan, 1971). These have mostly come from John Sheail. See, for example, John Sheail, Nature Conservation in Britain: The Formative Years (London: The Stationary Office, 1998); Sheail, Nature in Trust: The History of Nature Conservation in Britain (London: Blackie & Son Limited, 1976); Sheail, Pesticides and Nature Conservation: The British Experience, 1950-1975 (Oxford: Oxford University Press, 1985); Sheail, Seventy-five years in Ecology: The British Ecological Society (London: Blackwell Scientific Publications, 1987). For general environmental histories of Britain see: I.G. Simmons, An Environmental History of Great Britain: From 10,000 Years Ago to the Present (Edinburgh: Edinburgh University Press, 2001). This is more historical geography than environmental history as Simmons utilises the landscape itself in his study. See also Brian Clapp, An Environmental History of Britain Since the Industrial Revolution (London: Longman, 1994). This is more of an economic, than environmental history, and appeared at a time when environmental history in Britain was virtually non-existent. John Sheail has also written a study of environmental history in

Sources

To understand the diverse nature of the growth of environmental concern, a range of different sources have been utilised, such as Hansard, which feeds the focus on environmental governance in Chapter 2, in addition to providing evidence of environmental issues discussed in Parliament throughout this work. Publications produced by agencies such as the Nature Conservancy or the National Parks Commission, have also been used as evidence of environmental awareness. To understand something of a public consciousness developing, newspapers have been made use of. In order to get a comprehensive grasp of how the public perceived environmental issues, several different publications were analysed, two 'heavyweights' (The Guardian/The Observer and The Times) and two popular newspapers (The Daily Mirror and The Daily Express) with different political points of view. This way the bias has been somewhat mitigated. To better interpret some of the pressure groups analysed in this thesis, various archival papers have been consulted, some from the founders of organisations (such as Peter Scott, who was a co-founder of WWF) whilst those groups with no archival records have been researched in other ways, primarily through oral interviews with former members/leaders.

Because of the lack of archival sources for groups like Commitment, oral testimonies have been an important part of the research process. They have also

been useful in comprehending the development of an environmental

Britain. Sheail's work relegates discussion of the great London smog disaster of 1952, to two pages and makes no mention of the National Smoke Abatement Society, nor any comment on nature conservation television programmes. He also makes little mention of pressure groups or activism. See An Environmental History of Twentieth Century Britain, pp. 248-250 for his brief description of air pollution, T.C. Smout gives an overview of British environmental history in Smout, 'The Environmental Historiography of Britain', in Environment & History in Britain and Germany, edited by Franz Bosbach, Jens Ivo Engels & Fiona Watson (Munich: K.G. Saur, 2006), pp. 37-46. See also Smout, Exploring Environmental History.

questions how reliable oral evidence is. Listing different sources which historians usually encounter, for example, newspaper articles, or personal papers,
Thompson assesses each and describes the problems each has. With regard to oral history, there are problems innate with this research method – people have trouble recalling what happened about the event being researched; they become confused, or make facts up. The interviewee does not simply recall facts; they also assert their own interpretation of the past, which raises questions about reliability. However, as Alessandro Portelli claims, this issue of selective memory is also a problem for many written sources, often being produced by non-participants after events occur. Ultimately, oral historians are not so concerned about the failings of memory, but whether a respondent can remember events or experiences important to them. In cases of where blanks are needed to be filled in 'the oral recording provides the most accurate document.'

consciousness amongst activists. In The Voice of the Past, Paul Thompson

Oral interviews should be viewed as any other source – they can be difficult to work with and need to be understood within a broader context but, alongside other sources, can be a valuable tool. 88 With regard to this thesis, understanding what inspired someone to adopt an environmental point of view can be obtained through the oral interview. With no archival papers existing for Commitment, and TEC, and only a limited number and questionable documents for SOC'EM,

⁸³ Paul Thompson, *The Voice of the Past: Oral History* (Oxford: Oxford University Press, 1978), p. 99.

⁸⁴ Robert Perks & Alistair Thomson, 'Introduction', in *The Oral History Reader*, edited by Robert Perks & Alistair Thomson (London: Routledge, 1998), pp. ix-xx.
⁸⁵ Alessandro Portelli, 'What makes oral history important', in *The Oral History Reader*,

Alessandro Portelli, 'What makes oral history important', in *The Oral History Reader*, edited by Perks & Thomson, p. 68.

⁸⁶ Lynn Abrams, Oral History Theory (Oxford: Routledge, 2010), p. 103.

⁸⁷ Thompson, *The Voice of the Past*, p. 99.

⁸⁸ Using oral history offers insights into the relationship between a person and their position in society, between the past and the present, and between an individual experience and generalised account – see Abrams, *Oral History Theory*, p. 81. For instance, Don Kent, who was involved was SOC'EM was able to explain not just how the group functioned – and why it came about – in its early years but what influenced him in environmental issues and how this fed his interest in the group.

speaking with former members helped to fill in gaps which otherwise would go unfilled. Interviews with one of the founders of PEOPLE, Britain's first ecological political party, resulted in the access to original documents previously unseen by historians.

The oral history interviews (approximately twenty) supplemented information derived from more traditional research methods.⁸⁹ Most interviews were conducted in person, although some were done via Skype or email. By identifying the aims of this thesis, it was possible to narrow down candidates for interview so that they would be relevant to the period in question. Many of those interviewed were current or former members of the Green Party, with a sizeable number still active locally in environmental issues. Members of specific groups were also interviewed, as were other significant individuals. The time period of this thesis has meant that certainly for many of the earlier issues, fewer people who remember them are still alive. One problem in interviewing is the particular questions asked, as often later interviews can reveal issues which were not asked to earlier people which were nevertheless important. As many of the interviewees were being asked about specific groups or issues this was not as major a problem as it might have been. In addition, the fact the timeline for this thesis was set at the start – the thirty year period – and the major events were known about from the beginning, this further compensated for the problem. Everyone interviewed was happy to be named in this work, and have been done so, with no one asking for any redaction or censure on what was said.

⁸⁹ Each interview had a set of questions to guide the process, but these were a rough guide rather than anything concrete or absolute. All recordings have been conducted by the interviewer alone and are kept securely, with the interviewer having the only access. They will be destroyed after two years. The interviewer attended Northumbria University's ethics training session, in order to understand the ethical implications of this type of research method.

Of those group members who were interviewed, each spoke in largely positive terms about their involvement in environmental activism. Don Kent offered much in the way of detailing SOC'EM 'day in the sun' in their successful opposition to the motorway plan. He was less favourable about Commitment's protest in London in 1971, stating it lacked organisation and no one really knew what was happening. This was supported – to an extent – by Victor Anderson who commented that there was a sense of confusion among the protesters and that it all ended rather quickly, but it was important in getting the particular message Commitment had, across to Londoners. And some of the car drivers who were affected actually had conversations with the protesters and took leaflets from them. Ken Pollock, a co-founder of TEC, described TEC as a different sort of group to those which were appearing at the time – it was less interested in protest or direct action, believing this was a waste of time – and more involved with questioning authority and providing expert evidence on issues. This was in line with Doomwatch, which influenced it. Friends of the Earth, also supported TEC's argument about protest, as although they tacitly supported Commitment's aims, they did not overtly support the action itself because they wanted to be seen as family friendly – an organisation that could be used in schools. 90

Scholars of peace movements will note the lack of detailed commentary on the relationship between peace and environmental groups. There is evidence of some overlap between the two movements, members of some environmental groups being involved in the peace movement and vice versa; however, a clear

⁹⁰ Interview with Don Kent, 10 April 2012; Interview with Victor Anderson, 3 May 2012; Response to questions sent to Ken Pollock, one of the founders of TEC, received December 2012.

Green CND message did not exist until the 1980s and so it was not something which comprised of a major issue here.⁹¹

Research Questions

From the analysis of the case studies in this project, it is reasonable to ask some questions. The 1970s environmental movement was not only more inclusive of different environmental ideas but its pressure groups also tended to be more radical. What does this say? That only radical protest achieves its aims? Not necessarily. The radical group Commitment (Chapter 5) was deemed to be too extreme for FoE, who refused to overtly support them for fear of turning people off the environmental message. That being said, those who were affected by the Commitment protesters did engage with them in dialogue. SOC'EM was also far more successful than Commitment and survived a lot longer and yet did not engage in the kind of action Commitment did. The media response to FoE's bottle campaign, also, far outstripped its effectiveness as a campaign.

Does the environmental movement only exist when proactive groups emerge? Christopher Rootes claims that the levels and form of action and concern varies considerably and so a single definition – such as the movement only exists when proactive groups emerge – cannot be made. ⁹² However, whilst reactive groups, such as SOC'EM, do still exist in the 1970s, even their raison d'être in their mission statement was more wide-ranging than simple motorway opposition.

⁹¹ Veldman notes that 'Naïve as it may seem, before the 1970s CNDers did not connect the production of nuclear energy to the construction of nuclear weapons.' See Veldman, *Fantasy, the Bomb and the Greening of Britain*, p. 153. See also See Green CND, 'Embrace the Earth: A Green View of Peace', Green CND Pamphlet (CND Publications Ltd, 1983); Nigel Calder, 'Six reasons why Britain must give up the bomb', CND 1/73, pp. 1, 13-15, from London School of Economics Library's collections, (hereafter LSE Library), London.

⁹² A tension exists, Rootes argues, when using the term 'social movement', between its use in the most precise way, and when this term is applied in relation to the environment. This can cause confusion. 'Efforts to define social movements restrictively sit uncomfortably alongside common-sense understanding of what the "environmental movement" is' – see Rootes, 'Environmental movements and green parties in western and eastern Europe', pp. 324-325.

As environmentalism developed, a greater number of pressure groups emerged not as a result of any particular issue or event, but a more general concern of the fate of the planet.

And does the environmental movement only exist when grassroots pressure groups appear? It is true that grassroots activism emerged in the 1970s with the likes of SOC'EM and TEC, in a way that had not been present earlier. Yet using Rootes' concept of a social movement being composed of broad networks, this does not define whether these broad networks consist of grassroots activism or more traditional styles of protest. What is clear however, is that with the environmentalism of the late 1960s, new pressure groups emerged, some of which were grassroots-based.

Thesis Structure

The evolution of post-war environmental concern experienced an ebb and flow pattern, with some strands, such as the increased scheduling of nature conservation television programmes, being near constant issues. Other strands differed in that they were not constantly feeding the public with information but were major disasters which hit home the shocking impact of the destruction of the natural world. One such disaster, the great London smog, is analysed in Chapter 2, Nature Conservation and Pollution in Britain, c.1945-1959: From the great London smog to the Council for Nature. Whilst also dealing with another important issue in the growth of environmental awareness in 1950s Britain, nature conservation, an examination of pollution constitutes a significant portion of this chapter. In their own ways, both issues contributed to the development of an environmental consciousness. Air pollution has been viewed often from a human

health perspective. ⁹³ In the post-war period, however, responses to it also embodied some environmental themes, and the smog disaster in London led to the passing of the Clean Air Act in 1956. ⁹⁴

Smog affected many urban areas and clean air exhibitions held across the country fed environmental issues associated with this form of pollution into the public's psyche. Smog was indiscriminate in its target, affecting the public at large, rather than any particular class. Two urban areas outside London were particularly affected and comprise two case studies in this chapter – the cities of Sheffield and Coventry. Both Sheffield and Coventry were described as 'black' by the government committee established in the wake of the smog disaster which investigated air pollution and both also subsequently introduced successful regulation of air pollution. As Coventry imposed the first smoke control zone in the country in 1951, it was deemed to be a model for other areas in how effective they were. Their clean air exhibition was also popular and studying this and the similar exhibition in Sheffield reveal the diverse ways in which the public developed awareness of environmental problems. Sheffield set out a ten-year plan to rid the city completely of pollution. Sheffield and Coventry are studied in relation to their

⁹³ Health and environmental issues had intersected many times in the past, as far back as the 'Great Stink' of the 1850s, when the environment was seen as a cause of miasma or bad air. Following this, there was a separation between health and environmental issues. See Stephen Halliday, The Great Stink of London: Sir Joseph Bazalgette and the Cleansing of the Victorian Capital (Stroud: Sutton, 2001). Chad Montrie's recent work on a history of environmentalism in the United States has included chapters on public health reformers as part of a wider environmental awareness. See Chad Montrie, Chad Montrie, A People's History of Environmentalism in the United States (London: Continuum, 2011). Several other environmental historians have also connected together human health, disease and the environment. See Judith A. Bennett, Natives and Exotics: World War II and Environment in the Southern Pacific (Honolulu: University of Hawaii Press, 2009); Judith A. Bennett, 'Malaria, medicine, and Melanesians: Contested hybrid spaces in World War II', Health & History, 8:1 (2006), pp. 27-55; John McNeill, Something New Under the Sun: An Environmental History of the Twentieth Century (London: Penguin, 2000), pp. 195-211; McNeill, Mosquito Empires: Ecology and War in the Greater Caribbean, 1640-1914 (Cambridge: Cambridge University Press, 2010).

⁹⁴ Health and environmental issues came together again in the post-war period in responses to air pollution. See Virginia Berridge and Martin Gorsky, 'Introduction: Environment, Health and History', in *Environment, Health and History*, edited by Virginia Berridge and Martin Gorsky (Basingstoke: Palgrave Macmillan, 2012), p. 6.

clean air exhibitions, with both cities heavily affected by air pollution and subsequently introducing successful regulation of air pollution. These two studies reflect the extent to which concern for the environment developed across the country, in relation to air pollution. However, air pollution is not covered again as a case study here until Chapter 5, when pressure groups in the 1970s took up the cause. This is because, as the legislation took effect, other issues eclipsed it in advancing environmental ideas in society by the early 1960s.

Concern about the conservation of the countryside achieved the opposite effect. Observed through the creation of the Nature Conservancy, nature conservation television programmes and the increased visits to national parks after the National Parks Act was passed in 1949, anxiety about river pollution, ground pollution (litter) and general conservation issues grew exponentially. This resulted in the creation of the Council for Nature in 1958, established to coordinate conservation practices and inform the public.

This developed further into the early 1960s, seen in Chapter 3, *The Council for Nature*, 'SOS Rhino,' 'the nun of nature,' and NERC: The evolution of conservation issues in Britain, 1960-c.1965. Many scholars of the environmental movement in the United States focus on Rachel Carson's work *Silent Spring*, published in 1962. This is often described as the book that launched the environmental movement. In Britain, however, little detailed analysis exists with regard to the book's reception. Through describing the reception in Britain, this chapter provides an original contribution to knowledge by framing the British government's response within the context of wider nature conservation issues. Concern about pesticide use did not suddenly materialise following the publication

⁹⁵ See Catherine Mills, 'Coal, Clean Air, and the Regulation of the Domestic Hearth in Post-War Britain', in *Health and the Modern Home*, edited by Mark Jackson (London: Routledge, 2007), p. 225.

of Carson's work; rather apprehension over their use existed here from the early 1950s. This fed into a growing consciousness in the early 1960s, when the Council for Nature launched two 'National Nature Weeks,' with the aim of increasing public awareness in conservation matters and the natural world. A new pressure group, the WWF, also appeared which Colin Willock notes represented the slow beginning of a realisation of wider environmental issues, advancing the shift from conservationism towards environmentalism which occurred in the later 1960s. 96

Another major step forward in the growth of environmental awareness occurred in March 1967 with the sinking of the oil tanker the *Torrey Canyon*. Whilst this disaster had similarities with the London smog, including its role in engaging the public in environmental issues, there were also notable differences, such as the *Torrey Canyon* occurring at a time of greater public awareness and concern for the environment and growing media presence in society. In addition to this, the later 1960s saw a growing disillusionment with technological and industrial developments in society. In its Annual Report for the year 1966-1967, the Natural Environment Research Council (NERC) cited two events which powerfully illustrated the effects of human activity on the environment. These two events — the battle at Cow Green, and the *Torrey Canyon* disaster — frame the majority of Chapter 4, *Cow Green, the 'Battle of the Holiday Coast' and the Conservation Society: from conservationism to environmentalism, c.1965-1969.* The Cow Green battle, where authorities ignored the advice of conservationists, led to the Nature Conservancy undertaking a Nature Conservation Review (an inventory of the

⁹⁶ See Colin Willock, *Wildfight: A History of Conservation* (London: Jonathan Cape, 1991), p. xii.

xii.

97 Natural Environment Research Council Annual Report, 1967, p. 10, FT6/15, The National Archives (hereafter TNA), London.

country's natural environment). ⁹⁸ The Conservation Society, the first environmentalist pressure group, is also analysed in this chapter. This was the period when conservationism became part of the more inclusive environmentalism.

Chapter 5, From awareness to activism: the British Environmental Movement, 1970-1975 focuses on the period when, it is argued, the environmental movement came into being, as well as providing further evidence of the thriving environmental consciousness. This period saw a continuation of ideas discussed in case studies in previous chapters, such as pollution and nature conservation, and television programmes such as *Doomwatch*, and represents the crux of these ideas, and how they all came together under the broad banner of environmentalism. The pressure groups analysed here were more radical, more inclusive, and more indicative of groups which exist today. It was in this period that the environment fully became part of British social consciousness, evidenced through the establishment of the Department of the Environment in 1970 and the founding of PEOPLE in 1973, a political party which was a precursor to the modern Green Party, as well as more international, with the European Conservation Year of 1970 and the United Nations Environment Convention in 1972. Finally, Chapter 6, Conclusion, brings everything full circle, summarising the key arguments made in this work, and assessing how far the movement was uniquely British.

⁹⁸ Tim Sands, *Wildlife in Trust: A Hundred Years of Nature Conservation* (London: Elliot and Thompson Limited, 2012), p. 52. Natural Environment Research Council Annual Report for 1966 mentions that in 1970, the Nature Conservancy had planned a 'Year of Audit' for the British countryside, in correlation with the European Conservation Year, which also occurred in 1970. See Natural Environment Research Council Annual Report, 1966, p. 21, FT 6/15, TNA.

Chapter 2 – Nature Conservation and Pollution in Britain, c.1945-1959: From the great London smog to the Council for Nature

The Second World War transformed ideas about the environment in Britain. 99 Much of the natural flora and fauna of Britain was destroyed by the militarisation of the landscape in the preparation for war. This flora and fauna was replaced by airfields, factories, and pill boxes, as the government became increasingly involved in land use planning. As their actions seemed to be indiscriminate and uncontrolled, some ecologists became anxious. During the war, these scientists, including Sir Arthur Tansley, the recognised father of eco-systems, and Sir Julian Huxley, 'one of the most distinguished biologists of the time,' established the Nature Reserves Investigation Committee (NRIC). 100 In 1943, this Committee presented a list of proposed sites to the government, detailing possible locations for nature reserves. NRIC also produced a report claiming that reserves should be managed so that their ecology could be maintained. The management of natural areas they called 'conservation, a word with a long history in Britain.'101 The postwar period saw a shift from amateur naturalist activity to a more scientific approach and governance of conservation issues. Tansley was an important figure in post-war conservationism. 102 An advocate for scientific independence, he developed the theory of ecosystems, first using the term in 1935. His idea of an independent nature conservation body indicates the changing attitude to nature in post-war Britain. 103

⁹⁹ McCormick, The Global Environmental Movement, p. 25.

David Attenborough, *Life on Air: Memoirs of a Broadcaster* (London: BBC Books, 2010), p. 15.

p. 15.

Stephen Bocking, *Ecologists and Environmental Politics: A History of Contemporary Ecology* (London: Yale University Press, 1997), pp. 22-24. See Anon, 'Protection of Wild Life in Britain', *The Times*, Monday 6 August 1945, p. 7.

¹⁰² See 'Sir Arthur George Tansley (1871-1955), *plant ecologist*', by J.F. Hope-Simpson, rev. David E. Evans – http://www.oxforddnb.com/view/article/36415 – *Oxford Dictionary of National Biography*, accessed electronically 11 August 2013.

See Harry Godwin, 'Sir Arthur Tansley – The Man and the Subject: The Tansley Lecture, 1976', *Journal of Ecology*, 65:1 (1976), p. 18.

In the years following 1945, environmental issues went from obscurity to 'a widely respected and accepted principle of national policy.'104 At the time. American conservation ideas were held in high regard in Britain, particularly by Huxley who had spent some time there. 105 By implementing American ideas, Stephen Bocking argues that British ecologists sought to emulate the successes of the North American conservationists in receiving 'recognition for their work.' 106 Two environmental issues contributed significantly to environmental ideas growing within the British consciousness in the 1940s and 1950s – nature conservation and pollution. Although there was no correlation between the clean air campaigns and those dedicated to nature conservation, and whilst Rootes' broad networks were not evidenced in this period, these two milestones were influences for the later environmental movement, analysed in later chapters.

Environmental governance was an important part of this period with two key pieces of legislation doing much to protect the environment in Britain (the National Parks and Access to the Countryside Act, passed in 1949 and the Clean Air Act of 1956). Both these Acts of Parliament will be discussed below in a more general examination of conservation and pollution in the period, through examining nature conservation and the clean air campaign. As stated in Chapter 1, Peter Rawcliffe argues that it is important to study the influences on the environmental movement in order to understand it better. 107 In dealing with the period 1945 to 1959, this chapter reflects this attitude, arguing that the introduction of this legislation, opening up the countryside to the general public, and beginning to regulate industrial pollution provided fertile soil in which the environmental movement of the

¹⁰⁴ Max Nicholson, *The New Environmental Age* (Cambridge: Cambridge University Press,

^{1987),} p. 85.

105 See 'Sir Julian Sorell Huxley (1887-1975), zoologist and philosopher', by Robert Olby – http://www.oxforddnb.com/view/article/31271 - Oxford Dictionary of National Biography. accessed electronically 27 August 2013.

106 Bocking, *Ecologists and Environmental Politics*, pp. 22-24.

107 Rawcliffe, *Environmental Pressure Groups in Transition*, p. 23.

1970s could flourish. The great London smog disaster was not an isolated disaster, but rather the deadliest and perhaps most famous event out of a more general concern about the effect of smog experienced in cities across the country. Although air pollution still existed after the end of the 1950s, and the disaster was a 'milestone in environmental protection,' it became less of a concern than other issues and does not appear in this project again until Chapter 5. 108 When it does reappear, the focus was less on smoke abatement and more on pollution from motor vehicles, with several pressure groups protesting the increase in the number of vehicles in Britain. There were many peaks and troughs in the growth of environmental concern throughout the period; air pollution was one, with anti-air pollution campaigners framing their arguments around the great London smog disaster. In contrast, nature conservation was more consistent, growing as the decade progressed, and developing further in the 1960s. As television ownership became more widespread, the broadcast of a wide range of nature conservation programmes further brought environmental issues directly into the public's consciousness.

The Nature Conservancy and the National Parks Act

In 1948, the International Union for the Protection of Nature was established. This was an attempt to create a worldwide 'consciousness for nature conservation.' As evidence of a shift in ideas about human influence on the natural world, this international body changed its name in 1956 to the International Union for the Conservation of Nature and Natural Resources (IUCN). The inclusion of natural resources in the organisation's title is also indicative of the human dimension;

¹⁰⁸ Historian Stephen Mosley briefly mentions this in a blog post on the Friends of the Earth website. See Stephen Mosely, 'Air pollution: The impact of the 1956 Clean Air Act', 14 January 2014 – https://www.foe.co.uk/blog/air-pollution-impact-1956-clean-air-act – accessed electronically 3 April 2014.

¹⁰⁹ R.H.G. Jongman, 'Nature conservation planning in Europe: developing ecological networks', *Landscape and Urban Planning*, 32:3 (1995), p. 171.

rather than merely protecting nature, it now sought to conserve the resources which humans obtain from natural resources. There was a shift in focus from protection (preservationism) to management (conservationism). The IUCN sought to 'influence, encourage and assist societies throughout the world to conserve the integrity and diversity of nature and to ensure that any use of natural resources is equitable and ecologically sustainable.' They held film screenings which were designed to show the public what contemporary problems existed and how the IUCN was dealing with them. The organisation would later become the scientific wing of the international conservation movement, with the wildlife group the World Wildlife Fund (founded in 1961, Chapter 3), being the pressure group and campaigning arm, before both groups developed a looser relationship. 111

The following year, the British government passed the first major piece of environmental legislation after the Second World War – the National Parks and Access to the Countryside Act. This Act established the national parks system, which increased access to the countryside for the British public. After the landscape had been militarised and in many cases destroyed, these new national parks offered the public green spaces where they could go and experience nature, away from the pollution of urban areas. Yet the Act did more than this, owing to its remit 'covering nature conservation, landscape protection and quiet enjoyment of the countryside.' The National Parks Commission was responsible for running the parks whilst the Conservancy provided assistance in conservation issues, and

¹¹⁰ IUCN Vision and Mission – http://www.iucn.org/about/ – accessed electronically 11 August 2013; McCormick, *The Global Environmental Movement*, p. 35.

See G.34, speech given for the 10th anniversary of the WWF in 1971, Papers of Sir Peter Scott, GB0012, Cambridge University Library (hereafter CUL), Cambridge. The International Union for the Protection/Conservation of Nature also appears specifically in C.1145 and C.1146 in the Papers of Sir Peter Scott, GB0012, CUL. See also Maurice Strong, 'Wildlife and conservation', *The Times*, Saturday 28 September 1974, p. 22.

Gavin Parker & Neil Ravenscroft, 'Benevolence, nationalism and hegemony: fifty years of the National Parks and Access to the Countryside Act 1949', *Leisure Studies*, 18:4 (1999), p. 297.

dealt with conservation across the countryside more generally (that is, it was not limited to the National Parks). As Robert Arvill (pen name of Bob Boote, head of the Nature Conservancy Council, which the Nature Conservancy became in 1973) claims, this Act was 'undoubtedly the most important conservation legislation' passed after the war. When he was writing in 1970, he claimed that by that year. the measures imposed by the National Parks Commission and the Nature Conservancy made 'a significant contribution to the conservation of the landscape and wild life in Britain.'113 The Act described nature reserves as land managed for the purpose of providing opportunities for study and research into matters pertaining to British flora and fauna and 'the physical conditions in which they live. 114 The 'physical conditions' is a reference to ecosystems, ideas of which Tansley described and were further developed by Rachel Carson in Silent Spring (Chapter 3). The inference of ecosystem theory within the Act reveals not only the importance the government thought about this, but also the importance of environmental protection, as early as 1949. The Act was 'a popular idea,' and gained support from Parliament. 115

Members of Parliament (MPs) recognised the importance of the Act. During its second reading, Barbara Castle, MP for Blackburn, claimed that the Act was important 'in the social revolution' that was taking place because it marked 'the end of the disinheritance of the people of this country from the enjoyment of the countryside' and that 'preservation of the natural heritage' was vital. ¹¹⁶ There was

¹¹³ Robert Arvill, *Man and Environment: Crisis and the Strategy of Choice* (London: Penguin Books, 1970), p. 151. See also Andrew Pierssené, *Explaining Our World: An Approach to the Art of Environmental Interpretation* (London: E & FN Spon, 1999), p. 17 for mention of Bob Boote.

¹¹⁴ National Parks and Access to the Countryside Act, 1949, Chapter 97 12 13 and 14 Geo 6 – http://www.legislation.gov.uk/ukpga/Geo6/12-13-14/97/introduction – accessed electronically 28 November 2012.

Anon, 'Scots lead the world in conservation', *The Times*, Monday 8 December 1969, p. 3. Barbara Castle, House of Commons Debate, 'National Parks and Access to the Countryside Bill', 31 March 1949, vol 463 cc1461-568 (second reading) –

a push from MPs to accept the Act, on the strength of its approval by the public. The aesthetic values of the National Parks depended on the fauna which grew there. In order to preserve these, scientific knowledge was needed and thus the Nature Conservancy was established to research and support the fauna. 117 Lewis Silkin, the Minister of Town and Country Planning, 1945-1950, noted that the 'provisions should, in the long run, be of great scientific value to the community and should provide considerable interest and pleasure to many people in every walk of life. There are a great many more people interested in nature reserves than one might imagine. This environmental governance is some evidence of popular support for national parks and nature conservation more generally, yet this is something often overlooked by scholars of the period. The National Parks were not only recognised for their aesthetic worth but also for their scientific and nature-conservation value.

During the planning stages of the Act, in the years during and immediately following the end of the war, a Special Committee on Wild Life Conservation was formed as part of the wider National Parks Committee, to deal with any matters relating to wildlife that arose. The Special Committee included Max Nicholson, who would head the Nature Conservancy (NC) during the 1950s, Tansley, and Charles

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http://hansard.millbanksystems.com/commons/1949/mar/31/national-parks-and-access-to-the#S5CV0463P0 19490331 HOC 339 – accessed electronically 12 March 2013.

¹¹⁷ See Lewis Silkin, House of Commons Debate, 'National Parks and Access to the Countryside Bill', 31 March 1949, vol 463 cc1461-568 (second reading) – http://hansard.millbanksystems.com/commons/1949/mar/31/national-parks-and-access-to-the#S5CV0463P0 19490331 HOC 321 – accessed electronically 12 March 2013.

118 Lewis Silkin, House of Commons Debate, 'National Parks and Access to the Countryside

Bill', 31 March 1949, vol 463 cc1461-568 (second reading) – http://hansard.millbanksystems.com/commons/1949/mar/31/national-parks-and-access-to-the#S5CV0463P0_19490331_HOC_321 – accessed electronically 12 March 2013.

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makes passing reference to the National Parks Act in a list of post-war legislation passed by the Labour government – see Marwick, *British Society Since 1945* (London: Penguin Books, 2003), New Edition, p. 5. In an edited volume by Francesca Carnevali and Julie-Marie Strange on Britain in the twentieth century there is no mention at all of anything environmentally-related despite, as this thesis seeks to reveal, environmental issues formed a significant part of post-war British society, particularly by the 1970s. See Carnevali & Strange (eds), *Twentieth-Century Britain: Economic, Cultural and Social Change* (London: Pearson Longman, 2007), Second Edition.

Elton, another prominent ecologist at the time. 120 The report of this Special Committee, *Conservation of Nature in England and Wales*, was notable 'because it was quickly implemented' by those in power and led to the foundation of the Nature Conservancy. 121

Established by Royal Charter in 1949 the Conservancy was 'a milestone' for ecologists, informing and educating the public about environmental issues. 122 It assured 'the protection of many distinctive plant and animal communities,' demonstrating the importance the post-war government placed on nature conservation, establishing a separate agency rather than a body within a large organisation. 123 Through its role in the management of nature reserves, the NC offered post-war Britons new perspectives about nature, and sites they could visit to see nature conservation being applied. From studying the Annual Reports of the NC, however, it is clear that they valued education drives and strove to increase the awareness of the general public in all things conservation-related. 124 Their reports include specific sections on education and, importantly, also how the

¹²⁰ List of members of the Wild Life Conservation Special Committee, part of the National Parks Committee, House of Commons Debate, 'National Parks Committee', 19 March 1946, vol 420 cc334-5W –

http://hansard.millbanksystems.com/written_answers/1946/mar/19/national-parks-committee#S5CV0420P0_19460319_CWA_150_- accessed electronically 12 March 2013. See also 'Charles Sutherland Elton (1900-1991), animal ecologist', by Kitty Paviour-Smith – http://www.oxforddnb.com/view/article/49632?docPos=3_- Oxford Dictionary of National Biography, accessed electronically 27 August 2013; '(Edward) Max Nicholson (1904-2003), ornithologist and environmentalist', by Jeremy J.D. Greenwood – http://www.oxforddnb.com/view/article/89908?docPos=1_- Oxford Dictionary of National Biography, accessed electronically 27 August 2013.

Nicholson, *The New Environmental Age*, p. 38.

¹²² Bocking, *Ecologists and Environmental Politics*, pp. 13-14.

¹²³ Ibid.

frequency. In early reports it only covers a page but in later reports it takes up more space – see, for example, The Nature Conservancy Annual Report, 1952, pp. 5-6, FT6/2, TNA; The Nature Conservancy Annual Report, 1953, p. 13, FT6/3, TNA; The Nature Conservancy Annual Report, 1954, pp. 31-32, FT6/4, TNA; The Nature Conservancy Annual Report, 1955, p. 38, FT6/5, TNA; The Nature Conservancy Annual Report, 1956, pp. 51-54, FT6/6, TNA; The Nature Conservancy Annual Report, 1957, p. 75-77, FT6/7, TNA; The Nature Conservancy Annual Report, 1958, p. 84-87, FT6/8, TNA; The Nature Conservancy Annual Report, 1959, pp. 74-80, FT6/9, TNA; The Nature Conservancy Annual Report, 1959, pp. 74-80, FT6/9, TNA; The Nature Conservancy Annual Report, 1960, pp. 92-97, FT6/10, TNA.

Conservancy had disseminated their research. The ecologist William Pearsall has even described the organisation as the most important post-war development in ecology, which indicates the view held by some people about its establishment. 125 Although it had a relatively low profile, 'the young Nature Conservancy was presented with public relation gifts by the failure of the chemical industry to anticipate how sensitive public opinion would be about spraying with toxic products, and of other interests on oil spills, nuclear power stations, fires on forests, heath and moorland, encroachments on common land and river pollution.'126 The public perceived the 'usefulness of having an independently minded ... body, able and ready to champion popular concerns in this field.'127

After it was founded in March 1949, the NC quickly became established as the leading body in Britain on all conservation matters. 128 It sought to provide 'scientific advice on the conservation ... of the natural flora and fauna of Great Britain'; to manage nature reserves, and to organise and develop research. 129 Straight away, it set about working with media agencies and the wider public to inform and educate them about nature conservation practices, as evidenced in the Conservancy's Annual Reports. It identified school and university students as those who would be most influential in the future and who the NC should particularly target. However, young people were not the only ones the Conservancy identified as important. It wanted assistance from senior citizens as

¹²⁵ Described by William Pearsall in Sheail, Seventy-five years in Ecology, p. 188. Pearsall 'had a vision for conservation long before it became fashionable' and was a prominent ecologist and botanist - see 'William Harold Pearsall (1891-1964), ecologist and botanist', by A. R. Clapham, rev. Ghillean T. Prace - http://www.oxforddnb.com/view/article/35438 -Oxford Dictionary of National Biography, accessed electronically 10 October 2013. Nicholson, *The New Environmental Age*, p. 98.

¹²⁸ Bocking, *Ecologists and Environmental Politics*, p. 36.

House of Commons Debate, 'National Parks and Access to the Countryside Bill', 31 March 1949, vol 463 cc1461-568 (second reading) – <a href="http://hansard.millbanksystems.com/commons/1949/mar/31/national-parks-and-access-to-parks-access-to-parks-acces-to-parks-acces-to-parks-acces-to-parks-acces-to-parks-acces-to-parks-acces-to-parks the#S5CV0463P0 19490331 HOC 339 – accessed electronically 12 March 2013.

well, and those who had not recently been in education.¹³⁰ The Annual Report from 1952 established the organisation's role as a leading conservation body:

The need of an active policy for the conservation of nature is no new idea. The rapid expansion of the population following the industrial revolution, and the changes in its way of life, increased both the proportion of the surface of this country required for developed of one kind or another and the demands made on natural resources. The economic effects of two world wars within a period of thirty years have accelerated these processes, intensified the pressures from every side on land and its produces, and made it nearly impossible for the individual owner to maintain land for other than strictly utilitarian and often short-term purposes.¹³¹

The Nature Conservancy wanted to be 'an organised lobby that would "guide, stimulate and educate opinion" and do for conservation what the CPRE [Campaign to Protect Rural England] did for amenity.' As time passed, the 1950s saw the NC grow stronger and it expanded. The number of nature reserves in 1953 was 35 with 115 staff; by 1961, there were 92 reserves covering 70,000 acres, and 278 staff. After fifteen years of service, the Conservancy had over one hundred nature reserves in operation, some 2,000 sites of special scientific interest and had over two hundred scientists working for them, in addition to support from universities and elsewhere. It also examined the use of chemicals in agriculture during the later 1950s and early 1960s. The Nature Conservancy investigated bird deaths from pesticide spraying independently before Rachel Carson's *Silent Spring* was published in Britain in 1963. This work (analysed in detail in Chapter 3) described how all the natural world was inter-connected, and how affecting one

¹³⁰ Lord Forbes, House of Lords Debate, 'The Nature Conservancy', 28 February 1962, vol 237 cc976-1025 – http://hansard.millbanksystems.com/lords/1962/feb/28/the-nature-conservancy-1#S5LV0237P0 19620228 HOL 87 – accessed electronically 11 August 2013.

¹³¹ The Nature Conservancy Annual Report, 1952, p. 1, FT6/2, TNA.

¹³² Philip Lowe & Jane Goyder, *Environmental Groups in Politics* (London: George Allen & Unwin, 1983), p. 155; See also The Nature Conservancy Annual Report 1957, p. 3, FT6/7, TNA.

¹³³ Sheail, Seventy-five years in Ecology, p. 190.

¹³⁴ Max Nicholson, *The Environmental Revolution: A Guide for the New Masters of the World* (London: Penguin Books, 1972), pp. 184-185.

part could have grave consequences for other parts, including humans. In the introduction to that edition, Lord Edward Shackleton, son of polar explorer Ernest Shackleton, emphasised how the 'science of ecology teaches us that we have to understand the inter-action of all living things in the environment in which we live.' He continued by saying that it is fortunate that here in Britain we have an organisation to study these inter-actions, and to educate the public about the importance of conservation. 136

Across the world, Max Nicholson argues, with a growing urgency of environmental destruction, groups 'demanded a practical response.' This response was witnessed in the NC, as it tried to take a greater involvement in educating the public about conservation practices. It quickly realised that organised local interest in conservation issues complemented its own work. Whilst the Conservancy recognised the importance of educating the public, and it had begun to do this by the end of the 1950s, increasingly there were calls for a public body to be established representing the whole of nature; these public calls led to the creation of the Council for Nature, which was 'to be the voice of Britain's wildlife.' The Council saw its major role was 'to make people of all ages, conscious of their responsibility for the natural environment.' Yet Mother Nature herself forced Londoners to face their own responsibility in one of the great tragedies of the twentieth century, the London smog disaster of December 1952.

⁰ *Ibid*, p. 65.

¹³⁵ Lord Shackleton, 'Introduction' to Rachel Carson, *Silent Spring* (London: Hamish Hamilton, 1963), pp. xvii-xviii. This is the British edition; the American addition was published a year before, in September 1962.

¹³⁶ *Ibid.*

¹³⁷ Nicholson, *The New Environmental Age*, p. 35.

¹³⁸ Lowe & Goyder, *Environmental Groups in Politics*, p. 157.

Dudley Stamp, *Nature Conservation in Britain: A Survey of British Natural History* (London: Collins, 1969), p. 64.

Smog, the National Smoke Abatement Society and the clean air campaign

Londoners were no stranger to thick fog. In the opening chapter of Bleak House Charles Dickens described how thick fog affected London citizens:

[Fog] in the eyes and throats of ancient Greenwich pensioners, wheezing by the firesides of their wards; fog in the stem and bowl of the afternoon pipe of the wrathful skipper, down in his close cabin; fog cruelly pinching the toes and fingers of his shivering little 'prentice boy on deck. Chance people on the bridges peeping over the parapets into a nether sky of fog, with fog all round them, as if they were up in a balloon, and hanging in the misty clouds. 141

These bouts of fog were sometimes described as pea-soupers, due to their consistency. In December 1952, however, when a weather system settled over the city, no one expected or anticipated the devastation it caused. 142 This thick fog mixed with soot produced by homes and industries, to produce smog – a great smog which, it has been estimated, resulted in the deaths of approximately 12,000 people. 143 The great smog was Britain's first post-war environmental disaster. As

http://www.victorianlondon.org/index-2012.htm – accessed electronically 2 November 2012.

The some of the images if smog-covered London (and a few of other British cities) see – http://www.theguardian.com/environment/gallery/2012/dec/05/60-years-great-smog-londonin-pictures#/?picture=400439443&index=0 – accessed electronically 5 February 2014.

¹⁴¹ Charles Dickens mentions fog in London in the first chapter of *Bleak House* (London: J.M. Dent & Sons, Ltd, 1960), originally published in 1853, pp. 1-2. Other authors include Nathaniel Hawthorne in The English Note-Books (8 December 1857) and Robert Lewis Stevenson in The Strange Case of Doctor Jekyll and Mr Hyde (1886). For a list of publications complete with references as they appear in various publications, see 'The Victorian Dictionary' (entry 'fog' under the chapter on "weather") -

Much of the early commentary on the smog disaster estimated that about 4,000 died as a result. In later literature, this was increased to about 6,000. Most recently, it has been estimated that approximately 12,000 people died. Science writer Richard Stones claims that about 4,000 people died in the month of December from the smog or smog-related diseases. He then states that there has been a debate as to about another 8,000 who died in January and February 1953. The Ministry of Health, in 1953, estimated that the deaths as a direct result of the smog, were between 3,500 and 4,000, which was nearly three times that normal for that time of year. Officials stated that any deaths after 20 December 1952 had to be from other sources, but academics more recently - including epidemiologist Devra Davis, have questioned this argument. 'During the first 3 months of 1953, there were 8625 more deaths than expected. Officials put 5655 down to flu and listed 2970 as unexplained' this might be where the figure of 6,000 comes from, used in some later literature. However, Davis and Michelle Bell, who was a graduate student at John Hopkins University and worked with Davis on the study, concluded that many of the excess deaths of early 1953 could not have been caused by flu. The causes of death often listed at that time pneumonia and bronchitis for instance, had to be from the smog disaster they argued. Studying other data from a pan-European pollution project put the maximum number of deaths from flu at that time to be 2650, although it was likely to be far lower. It is difficult to disentangle these arguments and figures, especially as some have commented that there is

epidemiologist Devra Davis has claimed, many people would consider air pollution to be:

Something you can see coming out of a smokestack or tailpipe. But any material that gets into the air can become a pollutant, provided it remains in circulation. Some pollutants occur as particles, 50 times smaller than a human hair is round. The smaller the material, the longer it can stay aloft, the farther it can range, and the deeper it can travel into the fragile, spongy architecture of the lung. 144

A weather system settled over London in the early hours of 5 December 1952. On that morning, Londoners opened their curtains to a new day and came face-toface with what they initially perceived to be a regular pea-souper. What the residents of London failed to realise what that this was no ordinary 'London' particular.'145 This 'London particular,' Wolfgang Rüdig argues, best represents a 'major new environmental issue that came to the fore in Britain in the 1950s' – air pollution – and it was only after this disaster 'that it became a major political issue.'146 Air pollution affects the environment in different ways. As plants play a vital role in the balance of nature, air pollution can interfere with their natural mechanism to convert carbon dioxide into oxygen, by blocking out the sun, preventing photosynthesis. But lack of sunlight from pollution can also cause stunted growth and a reduced yield. In 1954, the government's Committee on Air Pollution (also known as the Beaver Committee, after the Committee's chair, Sir

a possible relationship between flu and pollution. See Richard Stone, 'Counting the cost of London's killer smog (air pollution)', Science, 298:5601 (13 December 2002), pp. 2106-2107. See also Davis, When Smoke Ran Like Water: Tales of Environmental Deception and the Battle Against Pollution (Oxford: Perseus Press, 2002), pp. 51-58; Paul Brown, '50 years after the great smog, a new killer arises: Attention focuses on car fumes on anniversary of 1952 disaster', *The Guardian*, 30 November 2002, p. 7. Davis, *When Smoke Ran Like Water*, p. 70.

¹⁴⁵ The phrase 'London particular' was another name for the 'pea-souper' fogs common in London in the nineteenth and early-mid twentieth centuries. Its meaning is now largely historic. See 'London particular', Oxford English Dictionary (Online Edition) – http://www.oed.com/view/Entry/109951?redirectedFrom=London+particular#eid139701110 accessed electronically 1 February 2014.
 Wolfgang Rüdig, 'Between Moderation and Marginalisation: Environmental Radicalism in

Britain', in Ecological Resistance Movements: The Global Emergence of Radical and Popular Environmentalism, edited by Bron Raymond Taylor (New York: State University of New York Press, 1995), p. 227.

Hugh Beaver) estimated that in Britain the damage to crops from pollution alone was £10 million. 'The acidity of the soil is increased, crops are retarded in growth, and animals suffer in health not only directly but also from poor quality grazing' either way, they are afflicted by any deterioration in the environment. 147

The disaster has many names – the 'Big Smoke,' the 'Great Smog,' the 'Killer Smog.' The Guardian described how different the fog was in December 1952 to previous pea-soupers, but it also reflects why this disaster is important to cover here:

Just as Southerners confidently believe Manchester to be littered with lifesize rain-gauges, so foreigners envisage Londoners peering for most of the year through a near-opaque mist. A certain legendary charm clinging to fog is more noticeable outside its customary area: nevertheless, the recent fog has aroused tales of never before equalled London pea-soupers. 148

Lasting five days, the great smog reduced visibility to near zero. The temperature fell, causing people to burn more coal to keep warm, and power stations and factories continued apace to burn fuel throughout the five days. The soot, which was produced from the coal burning, mixed with the fog to cause dirty yellow smog. Residents of London that December who sought sanctuary indoors found that even there they were not safe. 'Like humans, the pea-souper too, went inside cinemas ... wiping out the views of the screen' and theatre-goers left after the stage vanished in front of them. 149 A passer-by in Trafalgar Square on Friday 5 December witnessed Nelson's Column disappear before their eyes. 150 As the weekend wore on, the air was so dirty that in some parts of the city, the visibility was at best only a few feet and in many places it was zero, with transport being

¹⁴⁷ Committee on Air Pollution – Report, November 1954 (Cmnd. 9322), pp. 40, 44. See also Arvill, Man and Environment, p. 91.

¹⁴⁸ Anon, 'Miscellany: Pea-Soupers', *The Guardian*, 11 December 1952, p. 3.

Jonathan Sale, 'Return trip ... pea soupers', *The Guardian*, 4 December 1999, p. 7; Paul Simons, 'How Hampstead kept clear of London smog', The Times, Tuesday 29 November 2005, p. 63. ¹⁵⁰ Wise, *Killer Smog*, p. 96.

severely affected.¹⁵¹ Maureen Wroe, who lived in London in the years after the war, and who was interviewed for this project, remembers the disaster. She described how visibility was so bad that a bus turned into a residential street and drove up someone's drive, because the driver could not see where he was going.¹⁵² Some people even drowned in the Thames, *The Guardian* claims, as they could not see the edge of the river and so they fell in.¹⁵³

J.B. Sanderson notes that the disaster was 'the worst fog disaster that has ever occurred.' By the time that Sunday was over, the amount of pollution over London was between three to ten times above that which was normal for the time of year. Levels of sulphur dioxide were between three to twelve times above normal. The National Gallery's air-conditioning system had its filters clogged at a rate of 26 times more than is usual over a 24 hour period, and over one period of four hours, that rate rose to 54 times above normal. The term 'smog' was not used until after the disaster (the word itself being a conjunction of smoke and fog); instead the word 'fog' was used. People at the time did not initially perceive the disaster as anything special. Fog was a climatic event, a natural phenomenon, and from time to time was expected. On the other hand, smog was new, unexpected and dangerous. As the *Illustrated London News* commented in 1953, smog 'is a new and ugly word for an old and ugly phenomenon.' It described smog and air

¹⁵¹ Robert Alden, '1948 Donora Smog Killed 20; London Toll was 4,000 in '52', *The New York Times*, 26 November 1966, p. 28; see also Wise, *Killer Smog*, pp.115-124, 132-134. ¹⁵² Interview with Maureen Wroe, 7 June 2012.

To commemorate the sixtieth anniversary of the smog disaster, *The Guardian* put various pictures of London in the smog on their website. The caption to photograph no. 6 comments on some of those who died drowned because they could not see the river. See Anon, '60 years since the great smog of London – in pictures', *The Guardian*, Wednesday 5 December 2012 – http://www.theguardian.com/environment/gallery/2012/dec/05/60-years-great-smoglondon-in-pictures – accessed electronically 1 February 2014.

⁵⁴ Sanderson, 'National Smoke Abatement Society', pp. 243-244.

¹⁵⁵ Wise, *Killer Smog*, pp. 144-145.

pollution as "aerial sewage." ¹⁵⁶ Before the 1952 disaster, pollution had been perceived as the price of progress and an industrialised society. The smog marked the dividing line between acceptable air pollution and the understanding that "progress without pollution control is no progress at all." ¹⁵⁷ In 1953, the Committee on Air Pollution described the word 'smog' as 'a combination of natural fog and solid and gaseous polluting substances. ¹⁵⁸ The problem of air pollution,' this Committee noted, was 'one of outstanding importance' affecting 'human health' in addition to its 'far-reaching social effects and it has material economic consequences.

This word, 'smog,' produced 112 results in Hansard in the 1950s and some of these discuss the effects of smog on the environment as well as on human health. The Member of Parliament for Rossendale, Anthony Greenwood, claimed in 1951 that the air was so bad in East Lancashire, because of air pollution, that farmland needed 'an extra five hundredweight of lime per acre per year' to make it sufficiently productive so as to sustain life. Evergreens in suburbs had been recorded as being up to five times as big as those in industrial areas. At Kew Gardens, where, compared with other parts of London, the air was comparatively clean, the National Collection of Conifers was transferred to Kent because the levels of air pollution were having a detrimental effect on them. ¹⁶⁰ Sandy Irvine grew up in Huddersfield immediately after the war. He described the smog from

Anon, "Smog" – its causes and cures: how it came about, how it may be prevent and how its effects may be alleviated, a Manchester Experiment and a London Project', *Illustrated London News*, Saturday 14 November 1953, pp. 770-771.

The quote is from the National Society for Clean Air (which the NSAS became), quoted in an article by Paul Brown, '50 years after the great smog, a new killer arises: Attention focuses on car fumes on anniversary of 1952 disaster', *The Guardian*, 30 November 2002, p. 7

p. 7.

158 Committee on Air Pollution – Interim Report, 18 November 1953 (Cmnd. 9011), p. 5.

159 Ibid. p. 4.

Anthony Greenwood, House of Commons Debate, 'Smoke Pollution', 27 February 1951, vol 484 cc2047-58 – http://hansard.millbanksystems.com/commons/1951/feb/27/smoke-pollution#S5CV0484P0_19510227_HOC_539 – accessed electronically 22 May 2013.

local factories and the prevailing attitude at the time of 'where there's muck, there's brass'; this highlights the idea that thick levels of smoke meant that factories were working at full production, and that a certain level of pollution was necessary for prosperity.¹⁶¹

Smog outbreaks in America and Europe had occurred before the London disaster, yet authorities in London had failed to learn much from these. In 1948, the Pennsylvanian town of Donora was hit with smog, which killed approximately 70 people, and causing many more to become sick. Liège was also affected by smog in the 1930s. Physicians in London who were aware of these incidents had a sense of déjà vu and some experts speculated on what would happen if a city the size of London was affected, but the government paid little attention to them. For many years London had had more coal stoves per head of population than anywhere else in the world. This meant that when the thick fog hit London in 1952, the coal stoves exacerbated the problem.

When the smog came, the authorities distributed free face masks during the five days, which proved to be ineffective. 'As a result of pressure from the public and the press,' the government set up a committee to investigate the disaster. ¹⁶³

The Committee on Air Pollution suggested that coal fires should be replaced in domestic properties, with the government paying half and the other half being met by the property owner and local authority. This and other measures such as forcing factories to install smoke reducing apparatus, and make all new council houses use smokeless fuel, would reduce air pollution by four fifths. ¹⁶⁴ It was on this committee's recommendations that the government passed the Clean Air Act

¹⁶¹ Interview with Sandy Irvine, 3 April 2012.

Davis, When Smoke Ran Like Water, pp. 15-25, 33.

¹⁶³ Stephen Mosley, "A Network of Trust": Measuring and Monitoring Air Pollution in British Cities, 1912-1960', *Environment and History*, 15:3 (2009), p. 293.

¹⁶⁴ Anon, 'Drastic plan to defeat "smog": You may have to put in a new fireplace', *Daily Mirror*, Friday 26 November 1954, p. 4.

in 1956. 165 The Act, 'the first legal provision in the world to control domestic smoke - it also regulated industrial emissions - succeeded in reducing smoke levels in London by over 75 per cent in the next two decades.'166 It introduced smokeless zones, where it became an offence to emit smoke, soot and other particles. The Act did not completely solve the smog problem however, as there were 'no controls on other types of pollution, such as sulphur dioxide and nitrogen oxides, and it also allowed a seven-year transition before full compliance.'167 Nevertheless, the Act can be viewed as a success, with a reduction in the emission of smoke continuing in the years following 1956. In London, winter sunshine increased by 50 per cent. 168 The situation had improved by 1960 and when a weather front settled over London in December 1962, with ideal conditions for the formation of fog, it was just as thick and lasted even longer than in 1952, but smoke concentrations were reduced by 60 per cent. The death toll was just 700.¹⁶⁹ The Act reinforced the belief that environmental reforms could be achieved successfully through campaigning. 170 Many households, who were stunned at the level of the great smog disaster, its indiscriminateness and the levels of those who

¹⁶⁵ Clean Air Act, 1956, Chapter 52 4 and 5 Eliz 2 –

http://www.legislation.gov.uk/ukpga/Eliz2/4-5/52/introduction – accessed electronically 25 July 2013. See also House of Commons Debate, 'National Smoke Abatement Society', 8 March 1955, vol 538 cc142-3 –

http://hansard.millbanksystems.com/commons/1955/mar/08/national-smoke-abatement-society – accessed electronically 25 July 2013; House of Commons Debate, 'National Smoke Abatement Society', 29 March 1955, vol 539 cc13W –

http://hansard.millbanksystems.com/written_answers/1955/mar/29/national-smoke-abatement-society-1 — accessed electronically 25 July 2013; House of Lords Debate, 'Clean Air Bill', 30 May 1956, vol 197 cc587-650 —

http://hansard.millbanksystems.com/lords/1956/may/30/clean-air-bill – accessed electronically 25 July 2013.

¹⁶⁶ Evans, A History of Nature Conservation in Britain, p. 105.

¹⁶⁷ Philip Eden, 'Lightening up London Britain's weather: a farewell to the old pea-souper', *Daily Telegraph*, 2 December 2000, p. 36.

¹⁶⁸ Royal Commission on Environmental Pollution, First Report, February 1971 (Cmnd. 4585), p. 11.

Eden, 'Lightening up London Britain's weather', p. 36. See also Robert Alden, '1948 Donora smog killed 20; London toll was 4,000 in '52', *The New York Times*, 26 November 1966, p. 28.

¹⁷⁰ Rüdig, 'Between Moderation and Marginalisation', p. 227.

suffered ill health or died as a result of it, began to switch to smokeless fuels or get rid of open coal fires. 171

It is clear that a real concern for clean air did exist within the general populace and this often led the political agenda. Initially, the great smog of 1952 was viewed by some politicians as nothing extraordinary; it was through organisations like the National Smoke Abatement Society (NSAS) that this view was contested. Their advocacy of clean air led in part to it remaining topical within the general public's consciousness for the rest of the decade and in part led to the passing of the Clean Air Act of 1956. It is perhaps without coincidence that in 1958, the NSAS changed its name to the National Society for Clean Air. 172

As Sanderson notes, public awareness was raised following the smog disaster through the work of this group: in 1946, the NSAS received sixty newspaper clippings a month which pertained to smoke abatement. Five years later, this had risen to nearly 200 clippings a month. By 1954, it was nearing a thousand. 173 Although it is difficult to ascertain exactly how people interpreted these cuttings (and whilst the NSAS might have received 200 a month in 1946, this does not mean that there were only 200 stories printed in newspapers; not all newspaper stories were necessarily sent to them), the very fact that newspapers felt it was an important issue to discuss is some evidence of the growing status of air pollution in society in the period.

Formed in the 1920s, the membership of the NSAS consisted of three strands – local authorities, commercial organisations and members of the public. Local authorities involved themselves as they had to pass local clean air policies

¹⁷³ *Ibid*, p. 241.

Mosley, "A Network of Trust", p. 294.
 Sanderson, 'National Smoke Abatement Society', p. 236.

and they felt that their residents would be able to assist them with this; commercial organisations became involved themselves because it was critical to their businesses – the National Coal Board was a member – and some organisations which had an interest in clear air, such as the manufacturers of smokeless fuel. Finally the NSAS attracted concerned members of the public. This diverse membership sometimes led to tension amongst members – in 1952 the National Coal Board unsuccessfully tried to prevent the release of a critical report on coal by the NSAS.¹⁷⁴ This nascent environmental lobby group was nevertheless overwhelmingly successful in promoting anti-air pollution legislation to the government in the wake of the London smog. They gave speeches and press interviews, passing information to newspapers, and ensuring that the disaster was not forgotten about.¹⁷⁵ Some of this information even pertained to the effect of smog on the natural world, evidenced in some of their general meetings.

A General Meeting of the NSAS had been held eight months before the great London smog, in April 1952. Numerous groups affiliated with the Society attended. In the official report of the meeting, it was noted that progress had been made with local authorities and manufacturers regarding certain aspects of the prevention of 'atmospheric pollution.' Use of the term 'atmospheric pollution' established the fact that smoke and other pollutants were damaging the atmosphere, not just the immediate air we breathe in – it was therefore damaging the whole environment. In 1960, a pamphlet issued by the government and distributed to local authorities posed the question 'When should a council make a smoke control area?' It claimed smoke was the main cause of air pollution, and that as well as it affecting human health, it damaged buildings and the

¹⁷⁴ *Ibid*, p. 237.

¹⁷⁵ Wise, *Killer Smog*, p. 165.

¹⁷⁶ Minutes of Health Committee, CCA/1/5/105, NSAS West Midlands Division, Document 21 (155), The History Centre (hereafter THC), Herbert Museum & Art Gallery, Coventry.

environment. It continued by stressing an economic case for smoke abatement: Buildings needed to be repainted and restored because of damage from pollutants and a reduction in smoke would mean that towns 'will be pleasanter, healthier and less costly places to live in.'177 As well as an economic case, therefore, the pamphlet also made a case for the environment, when discussing smoke abatement.

In 1958, the National Smoke Abatement Society's Llandudno conference similarly included discussion of environmental issues within the conference proceedings. Air pollution, it was noted, could travel long distances; 'the effect of drift pollution on every kind of natural amenity – on atmosphere and visibility, on animal and bird life, on hill grass and hill farming and the whole ecology of an undeveloped area – can be easily understood.'178 Continuing, the Conference report claimed that:

Hill farmland, in particular, which normally has a higher rainfall than the average for the country as a whole, already runs the risk of soil deterioration through erosion and leaching, and this is made much more serious if the air is polluted and if impurities are ... present in raindrops ... Foresters and farmers then complained of retarded tree and crop growth, of poor pastures, deterioration of stock and reduced milk yields. 179

The inclusion of the phrase 'whole ecology of an undeveloped area,' and a section on 'Hill farmland' are significant. In the mid-1960s, many ecologists in Britain were concerned with plans by the company Imperial Chemical Industries (ICI) to build a reservoir in a desolate 'undeveloped area' of the Pennines (a hilly area with a

¹⁷⁷ Circular from Ministry of Housing and Local Government, 7 July 1960 – Clean Air Act, 1956, the Use of Sticks and Paper in Smoke Control Areas, CCA/3/1/15274/1, THC. ¹⁷⁸ Report from the National Smoke Abatement Society Conference of 1958, held in

Llandudno, p. 3, Sheffield and District Clean Air Committee: Minutes and Reports, 6 November 1956-5 May 1959, CA-VAC/122, Sheffield City Archives (hereafter SCA), Sheffield. There was also concern for the 'squalor' of the urban environment and that towns could be nice places to live if smoke did not degrade the environment. This was mentioned at the NSAS Annual Conference in 1948 - Anon, 'The Ravages of Smoke', The Times, Saturday 2 October 1948, p. 3.

179 Report from the National Smoke Abatement Society Conference of 1958, p. 3.

higher than average rainfall, see Chapter 4). Whilst this was approached from a different angle – the fact rare plant life existed in that area – the presence here of 'whole ecology' is further evidence that some were concerned with the wider implications of pollution, as well as the environmental credentials of the NSAS itself. Through sources such as this, it becomes clear that some sections of society were aware of, and deeply concerned, about the destruction of the natural world by human activity before the 1970s.

The NSAS was a public interest pressure group, concerned with issues which affected a vast number of people and used a variety of resources which it had at its disposal. It had established a reputation of being a moderate, but knowledgeable body. 'According to its journal, it is a question "not of any blitzkrieg [sic] but of an untiring war of attrition along the whole of the air pollution front." 180 Claiming that an intensive or continuous publicity campaign was impractical, it focused instead on those informed citizens who would then be able to educate others. 181 Government ministers were impressed with NSAS and one believed that its independent status was 'one of its assets.' In Chapter 5, two pressure groups that took up the mantle of clean air in the 1970s are assessed. Instead of a 'war of attrition,' however, these groups often resorted to more 'blitzkrieg'-style tactics. The pressure group Commitment did not undertake a continuous public campaign in the early 1970s, but nor did it exist for as long a period as the NSAS (Commitment was influenced by the Young Liberals, and as their power waned, so did that of Commitment). Instead it launched an attack on the centre of London on a prime shopping day in a prime location, protesting on Oxford Road in the run-up

¹⁸⁰ Sanderson, 'National Smoke Abatement Society', p. 238.

¹⁸¹ Ihid

Harold Macmillan, House of Commons Debate, 'Smoke Abatement', 15 December 1953, vol 522 cc188-9 – http://hansard.millbanksystems.com/commons/1953/dec/15/smoke-abatement#S5CV0522P0_19531215_HOC_121 – accessed electronically 25 July 2013.

to Christmas. This is an example of the change in the zeitgeist from a more conservative-inspired approach towards a more radical one. Both the NSAS and Commitment campaigned against air pollution but whilst the NSAS was considered to be moderate, Commitment protested through direct action. In Chapter 1, it was stated that some pressure groups harness external influences to increase their support. This was also the case with the NSAS. Whilst it had existed for many years by the 1950s, its appeal grew only after the London smog disaster, as people looked for ways to deal with this new environmental menace.

In addition to the NSAS, other organisations, including NSAS member the Gas Council were concerned about air pollution and produced media programmes to inform the public about the benefits of clean air. In 1955 the Council's Film Library included over 15,000 titles. It was estimated these were shown to approximately 5.2 million people and school children at 45,500 screenings. Four of the Council's films were shown in ordinary cinemas, viewed by a further 2 million people over the year. The Council also issued over 2 million educational publications about clean air, in 1955 alone. 183 The Council's 1954 film Guilty Chimneys showed audiences the problems of air pollution on both human health and the environment. When the film was released, memories of the smog were still fresh. The facts and figures listed in the film drove home the point that Britain's annual consumption of 200 million tonnes of coal was not only old-fashioned but also uneconomic. In addition to the issue of public health, the film described the effect of the sulphurous elements of smog on public buildings, which required restoration from the public purse. It also explained the effects on crops and vegetation. The film's intention was to educate people about the evil of air pollution (especially smog) as well as giving viewers information about the gas industry and

¹⁸³ The Gas Council, Sixth Annual Report and Accounts, 31 March 1955, p. 48.

its contribution to the national economy. 184 It was screened at NSAS events, but was also broadcast on the BBC 'to an estimated audience of two million' as well as playing at many other events. 185

The narrator of the film explained that no one was safe from the menace of smog, and described the job of a hospital doctor who had to deal with a situation involving its effects:

That ambulance you saw wasn't coming from an accident. Let's be kind and call it manslaughter, or if you like murder. We haven't caught the culprit, though we know him well. Between us, we created him. For a smoke fog like a London pea-souper is only a dramatic upshot of a process that is going on over time. For this patient we'll call it – heart failure, or acute bronchitis. What we know quite well is if it weren't for the smoke laden fog outside, he would be on his feet at this moment. 186

The film 'played a not insignificant part in influencing the political mood that resulted in the clean air legislation.' Part of the message of the film was that air pollution could be reduced by burning different fuels (in the film's case, gas). This was pertinent to the London disaster as some of the blame lay at the door of

¹⁸⁴ Katy McGahan, Curator (Non-Fiction), British Film Institute – her commentary appears on the BFI website at – http://www.bfi.org.uk/inview/title/6397 (although this can only be accessed through an academic subscription) accessed electronically 12 August 2013.

¹⁸⁵ The Gas Council, Seventh Annual Report and Accounts, 31 March 1956, p. 41. For the

The Gas Council, Seventh Annual Report and Accounts, 31 March 1956, p. 41. For the period, a television audience of two million was a significant number of viewers – Jack Williams claims that when the BBC resumed its television service in 1946 after the war, only a minority of people had access to television; by 1960 the great majority of the population watched television daily. It was during the 1950s when television overtook radio and reading the newspaper and the main leisure activity. In 1951, fewer than 10 per cent of all households had a television set; by 1961 this stood at 75 per cent. Similarly, in 1950, 344,000 combined radio and television licences were sold (compared with 11.8 million radio only licences sold); ten years later this had risen to 10.5 million, more than double the radio only licences. See Williams, *Entertaining the Nation*, pp. 1, 7, 14. John Cain states that between 1951 and 1954 the number of people owning television sets in Britain rose to three million. This means that two thirds of all television owners in Britain in 1954 watched *Guilty Chimneys* on the BBC – see John Cain, *The BBC: 70 Years of Broadcasting* (London: BBC Publications, 1992), p. 64.

¹⁸⁶ Gas Council, *Guilty Chimneys* (1954), film from the British Film Institute, 18 minutes 27 seconds – http://www.bfi.org.uk/inview/title/6397 – accessed electronically 12 August 2013. The quote occurs between 2 minutes 28 seconds and 3 minutes 4 seconds.

Patrick Russell, Senior Curator (Non-Fiction), British Film Institute – http://www.bfi.org.uk/inview/title/6460 (this can only be accessed through an academic subscription) accessed electronically 12 August 2013. See National Coal Board, *Arthur Cleans the Air* (1961), film from the British Film Institute, 29 minutes 45 seconds – http://www.bfi.org.uk/inview/title/6460 – accessed electronically 12 August 2013.

Londoners, who burnt more coal to keep warm with the drop in temperature under the fog and exacerbated an already difficult situation. Devra Davis also blamed the government and in particular Macmillan for concealing facts. 'A later claim by the Ministry of Health that 5,655 people had died of influenza in the first three months of 1953 was a fabrication to hide the smog deaths.' In *Guilty Chimneys*, death from smog was described as murder. The *Daily Express* also labelled smog in a similar fashion. An article from 1956 claimed that soon the clocks will be put back and the smog would return. 'This murder-by-inaction must stop.' 189

An additional film, released in 1961, entitled *Arthur Cleans the Air* dramatised a couple using new smokeless fuels, showing how good these new fuels were, compared with dirty old coal. It was made 'to publicise and explain' the use of new types of fuel, particularly 'smokeless fuels like Coalite, Rexco and Sunbrite.' It was shown at 'specially arranged non-theatrical screenings ... to residents of the smokeless zones.' 190

As well as information films, clean air literature also included discussion of the environmental problems of air pollution.¹⁹¹ An information leaflet, likely produced in 1956, included sections on the effect of pollution on animal and plant life:

Smoke reduces the available sunlight—needed to form carbohydrates—by anything up to 40%, thus stunting growth. The tarry matter from smoke also chokes the stomatal openings and interferes with transpiration as well as assimilation, plants with a hairy or crinkled surface (calceolaria, primrose, hollyhock) being chiefly affected: London Pride, with hard smooth leaves,

Express, Monday 8 October 1956, p. 6.

¹⁸⁸ Davis, *When Smoke Ran Like Water*, pp. 51-58; Brown, '50 years after the great smog, a new killer arises', *The Guardian*, 30 November 2002, p. 7. Also see footnote 143, above. ¹⁸⁹ Chapman Pincher, 'Now we've put the clocks back it'll soon be on us again!', *Daily*

¹⁹⁰ Russell, Senior Curator (Non-Fiction), British Film Institute –

http://www.bfi.org.uk/inview/title/6460 – accessed electronically 12 August 2013.

¹⁹¹ This leaflet is significant because of its producer – the Socialist Medical Association.

This leaflet is significant because of its producer – the Socialist Medical Association. This group was concerned with people's health. It was not an environmental group, yet the leaflet includes a discussion of the effects of pollution on the environment.

survives well. Ruston also states that the presence of free acid in the air tends to lower the reproductive capacity of plants and to deprive them of the power to produce colour, while free acid in rainwater entering the soil makes it sour and limits the activity of soil organisms. Conifers suffered so much at Kew that the authorities had to set aside an area of land near Tunbridge Wells for the formation of a National Collection; London nurserymen have suffered severe losses of tomato and other seedlings and have had to move further up the Lea Valley, while in Yorkshire even farms have had to be abandoned. 192

The leaflet concludes with the question 'What to Do,' describing briefly what people could do locally to ensure the air stayed clean. 'Where there is visible pollution – protest – write to your local council ... to your MP, to the press. Point it out to others, discuss it with your friends, inform people of the dangers and call protest meetings ... Raise the matter in trade union branches ... arrange public debates.' 'Organised protest' it determined 'will bring results.' ¹⁹³

Moreover, some politicians recognised the effect of air pollution on the natural world. This can be seen in Parliamentary debates recorded in Hansard. Dust from industrial plants 'pollutes the air. It affects health. It obscures the sunlight. It fouls the plants' and makes it difficult to sell plants. Those in society who were seeking environmental legislation to combat air pollution adopted a policy of education, persuasion and change by working with local smoke abatement societies. They sought to influence the general public as well as politicians, academics, scholars, technical societies and the like. A letter which

¹⁹² 'Death in the Air! The menace of air pollution', Socialist Medical Association leaflet, n.d. probably 1956 – http://www.sochealth.co.uk/public-health-and-wellbeing/death-in-the-air-the-menace-of-air-pollution/ – accessed electronically 4 October 2012. The leaflet does not make clear who 'Ruston' is and further research proved unfruitful.

¹⁹³ Ibid

Sydney Irvine, House of Commons Debate, 'Clean Air Bill', 3 November 1955, vol 545 cc1221-333 (second reading) – http://hansard.millbanksystems.com/commons/1955/nov/03/clean-air-bill#S5CV0545P0 19551103 HOC 394 – accessed electronically 22 May 2013. See also Anthony Greenwood, House of Commons Debate, 'Smoke Pollution', 27 February 1951, vol 484 cc2047-58 – http://hansard.millbanksystems.com/commons/1951/feb/27/smoke-pollution#S5CV0484P0 19510227 HOC 539 – accessed electronically 22 May 2013.

195 Quote appears in Wise, *Killer Smog*, p. 43.

appeared in *The Times* in March 1952, and signed by several members of the NSAS, described the effect of smoke on the environment as well as on human health. Acting as an appeal for new members, the signatories claimed the NSAS had already done sterling work but in order to continue its education drive it needed new members. This is further evidence of the National Smoke Abatement Society's desire to educate and inform the public. It is clear that the NSAS was an example of the more reserved pressure groups which existed at the time, when compared with the more radical groups of the 1970s. However, through the Society's desire to educate, and the inclusion of environmental aspects of air pollution in their conference reports, it is evident that some people before the 1970s had well-defined ideas about protecting the natural world.

The NSAS's concern about air pollution was realised in a map, included in the Interim Report of the Committee on Air Pollution in November 1953, which showed areas most affected by smog. These were overwhelmingly the industrial heartlands of Britain – Sheffield, the West Midlands (including Coventry), the North West and London. 197 Whilst the 1952 smog disaster only affected London, the clean air campaign was not simply a London campaign; it stretched across England. Two cities, in particular are noteworthy. Coventry was the first city to introduce smokeless zones, a year before the smog, in 1951. Sheffield dealt with smog in a similar way to Coventry, establishing a Centre for Environmental Studies and ultimately seeking to define itself as the greenest city in Europe. Whilst these two cities provide a case study for regional campaign activities, they by no means represent the entire country in activity concerning clean air. They do, however, provide a snapshot of regional activities and how two industrial cities

¹⁹⁶ S.N. Dugguid, George Elliston, Hugh Gaitskell et al, 'Abatement of Smoke', *The Times*, Tuesday 4 March 1952, p. 7.

¹⁹⁷ Committee on Air Pollution – Interim Report, 18 November 1953 (Cmnd. 9011), p. 32.

dealt with air pollution. For instance, the flora of an area could be adversely blighted by air pollution because the flora 'cannot get up easily and run away, and ... in certain regions, near to steelworks, for instance [such as in Sheffield] ... trees which were developed before the steelworks were built, and were growing healthily, have in fact been killed since they grew there.'198 Sheffield was affected by air pollution because of its steel industry and so warrants analysis here in the ways it combatted it. In addition, the historian Catherine Mills has researched the campaigns in these two cities and, as there is relatively little in the historiography concerning the campaigns, her analysis helps explain what happened on a regional level. 199 In Sheffield, iron rusted three times as fast as in Farnborough because of pollution, with ultra-violet rays 25-55 percent less from November to March.²⁰⁰

Sheffield's city council established the Health Education Service in June 1959. The Service's first job was to produce clean air publicity to educate residents as to how to reduce atmospheric pollution. 201 Sheffield's clean air campaign was pushed forward with gusto and the city became known as a place to study the effects of air pollution on people and the environment. 202 It introduced its first smokeless zone in 1959, and created the Fuel Research Department at the University of Sheffield which provided research on reducing air pollution. The

¹⁹⁸ Kenneth Mellanby, 'Effects of Pollution on Wildlife in Britain', in *Population and Pollution*, edited by Peter R. Cox & John Peel (London: Academic Press, 1972), p. 47.

Catherine Mills, 'Coal, Clean Air, and the Regulation of the Domestic Hearth in Post-War Britain', in Health and the Modern Home, edited by Mark Jackson (London: Routledge, 2007), pp. 224-243. ²⁰⁰ Anon, 'Zone is already livelier, healthier', *Sheffield Telegraph*, Wednesday 18 November

^{1959,} p. 9.

²⁰¹ F. St. D. Rowntree, 'Sheffield's Clean Air Campaign', *Health Education Journal*, 18:1

^{(1960),} p. 25.

Sheffield City Council has produced a guide to their sources on Clean Air: 'Sources for the Study of Sheffield's Battle for Clean Air' (this is available via a pdf or Word document) https://www.sheffield.gov.uk/libraries/archives-and-local-studies/research-guides/Clean-Air.html - accessed electronically 25 July 2013. On page 7 of the document, J.W. Batey, Sheffield Medical Officer of Health, in his Annual Report, 1956, is quoted as saying, 'Sheffield is one of the cleanest industrial cities in Europe'.

University's Social and Industrial Medicine Department also involved itself in air pollution research and from 1962 the Geography Department also became involved, establishing a Centre for Environmental Studies. 203 The very fact that Sheffield University established a specific department to study different fuels reflects the significance that clean air had in certain areas of the 1950s. Similarly with their Centre for Environmental Studies – to have such a Centre present in British universities before the widespread environmentalism of the 1970s would seem to indicate that the public were aware of environmental issues. The university surely would not have created either the Fuel Research Department or the environmental studies centre had the demand not existed. Sheffield is also worth studying because the council set out a plan to drastically reduce pollution levels. 'No more will Sheffield and smoke be looked upon as synonymous,' the Sheffield Telegraph noted in response to the plan. ²⁰⁴ The clean air campaign was set to last 10 years or more – until the city got rid of atmospheric pollution. Within a five year period, the council sought to cover 60 percent of the city in smokeless zones. This was about 80,000 homes, as well as industry. 205

Those living in Sheffield's smokeless zones were visited by council officials to explain the new regulations and leaflets were distributed to households. Press conferences were held and the city's youth clubs and women's organisations hosted speakers to discuss air pollution. Posters were also placed on public vehicles. Competitions were held and the city library had promotional bookmarks and car stickers to give away, whilst the Department of Education produced material on smoke abatement for use in schools. Films about clean air were screened each month and a major effort was made to educate school children.

²⁰³ Mills, 'Coal, Clean Air, and the Regulation of the Domestic Hearth', pp. 229-230.

Anon, 'Zone is already livelier, healthier', *Sheffield Telegraph*, Wednesday 18 November

²⁰⁵ Anon, 'Clean air war to begin', Sheffield Telegraph, Tuesday 3 November 1959, p. 5X.

Special education resources were provided to schools, including a Clean Air Year Book, leaflets for science teachers, background notes, graphs, historical materials and visual aids. Clean air literature and information was embedded in all health education promotions and more general council literature. A press conference was held with local and national newspapers, at which journalists were provided with information on the history of air pollution and how to combat it. Data sheets were sent to each newspaper which contained information and facts and figures about air pollution. In total, 4,000 posters were displayed, in addition to 125,000 leaflets and booklets which were distributed throughout the city. At the film screenings which were a central part of the campaign, 75 per cent of attendees were adults. 206 A civic meal was organised and a public exhibition held, with the guest of honour being the Member of Parliament for Warrington, Edith Summerskill, a noted supporter of clean air. In Parliament, Summerskill had said she was surprised how many people, particularly in her constituency, were aware of the Clean Air Bill and were concerned about air pollution, especially 'those living in those areas whose air is polluted.'207 Summerskill was chosen to appeal to women and brought with her 'a jar of air, "Sheffield's muck." The chair of the Public Health Committee for the city, Mrs Patience Sheard, described how "No Sheffield woman will ever buy light-coloured clothes without taking into very serious account what her dry cleaning bills will be".' Air pollution made washing grimier, increased cleaning bills, covered curtains and paintwork, turned doorsteps black the minute

²⁰⁶ Mills, 'Coal, Clean Air, and the Regulation of the Domestic Hearth', pp. 230-231; Rowntree, 'Sheffield's Clean Air Campaign', pp. 25-30.

Edith Summerskill, House of Commons Debate, 'Clean Air Bill', 3 November 1955, vol 545 cc1221-333 – http://hansard.millbanksystems.com/commons/1955/nov/03/clean-air-bill#S5CV0545P0 19551103 HOC 371 – accessed electronically 16 July 2013.

Regulation of the Domestic Hearth', pp. 230-231. See

Ailso, 'Coal, Clean Air, and the Regulation of the Domestic Hearth', pp. 230-231. See also Rowntree, 'Sheffield's Clean Air Campaign', p. 30.

they had been scrubbed, and turned nylon slips grey the instant they were put on.

This was the experience women faced in industrial areas.²⁰⁹

This was also observed through the white dress worn by a six year old girl who opened the exhibition, highlighting the difference between a clean white dress and dirty polluted air. The exhibition was laid out in a deliberate fashion, forcing people to walk in a clockwise direction which progressively demonstrated the problems of pollution, solutions to combat it, and the end result – a modern environment, clean inside and outside the home. Damaged lungs from breathing dirty air were displayed, with data linking air pollution to respiratory diseases, damage to crops, stonework and fabrics. The exhibition fed wider themes of the city and attempted to refashion the city's image, as a modern city on the move. The campaign ended when the first smokeless zone was established in the city on 1 December 1959.²¹⁰ There were also the latest types of clean air appliances, 2,000 smoke gauges set up, and staff on hand to speak with those visiting the exhibition. In all, the council deemed the exhibition to have been a great success with over 20,000 visitors attending, and locals had expressed interest in clean air, asking officials questions about the different types of fuel available, how to apply for grants and so on.²¹¹

Summerskill's ploy of bringing a jar of fresh air was echoed in the early 1970s by London-based group Commitment (Chapter 5). In their campaign against air pollution, they marched into central London with balloons filled with fresh country air. Both Summerskill and Commitment sought to highlight the differences

²⁰⁹ Patience Sheard is quoted in Anon, 'Clean air war to begin', *Sheffield Telegraph*, Tuesday 3 November 1959, p. 5X. Jean Rook, 'What Clean Air will mean for us women', *Sheffield Telegraph*, Thursday 19 November 1959, p. 7. See also C.A.J. Plummer, 'Grit and Dust', *Sheffield Telegraph*, Monday 26 October 1959, p. 7.

²¹⁰ Mills, 'Coal, Clean Air, and the Regulation of the Domestic Health', pp. 231-232.

²¹¹ Graham Key, '£2m. clean air scheme just good business', *Sheffield Telegraph*,

Wednesday 18 November 1959, pp. 7-8; Anon, 'Interest in Clean Air Exhibition', *Sheffield Telegraph*, Friday 4 December 1959, p. 5X.

between contaminated urban air and clean country air. In Liverpool, Commitment demonstrated to local authorities how polluted the River Mersey was by washing white clothes in the river. Outside the clean air exhibition in Sheffield stood a large glass jar full of dirt. This jar represented the amount of dirt which accumulated in the air over one square mile of the city over a five minute period. In the run-up to the exhibition, the local press in Sheffield reported that 95 percent of all residents in the area which was due to be covered by the smokeless zone when it became active on 1 December, had already either adapted domestic fires to burn smokeless fuels, or were in the process of doing so. 1,160 households would be covered in the zone, along with 554 industrial and 1,292 commercial properties. It was also predicted that this figure would rise to 100 percent by 1 December.

In contrast to the steel-producing heavy industry in Sheffield, Coventry had a smaller, more technical industrial base. Coventry's smokeless zones were used as a model in the Committee on Air Pollution's report of 1954, which led to the Clean Air Act of 1956. Yet both Sheffield and Coventry had clean air campaigns which locally sought to educate the public in the benefits of smoke abatement. Coventry had been a heavy casualty of the bombing raids by the German air force during the war, and the post-war development offered the city an opportunity to redevelop areas of the city. In the interwar period, concern had been raised about the levels of soot and other pollutants being produced by the city's industry, although at the time there were no measures in place to deal with them. The city's clean air campaign was similar to Sheffield's although smaller in scale. In 1957,

²¹² Anon, 'Anti-pollution demonstration', *The Guardian*, 26 October, 1971, p. 7; Interview with Victor Anderson. 3 May 2012.

Rook, 'What Clean Air will mean for us women', p. 7.

Anon, 'Most of clean air zone fires adapted', *Sheffield Telegraph*, Monday 26 October 1959, p. 5X.

Anon, 'Clean air war to begin', p. 5X.

Coventry held an exhibition, "Down with Smoke" which was opened by Hugh Beaver, chair of the Committee on Air Pollution. Posters were displayed across the city and officials visited citizens in their homes to explain the Clean Air Act, and smoke abatement methods and how they would affect them. The Coventry exhibition featured information revealing the effect of air pollution on the natural world. Graphics and pictures were used to illustrate how pollution from industry and domestic fires could be abated. Three images of human lungs were shown – a rural resident's lung, which was clean and healthy; an urbanite's lung, brown and patchy; and an industrial worker's lung which was black. As well as these, two evergreens were displayed – a healthy one, grown in the countryside, and a sick, wilting one, grown in an urban area. This connects with themes discussed in Chapter 5, when, in 1973, it was perceived that trees were an important element of nature conservation and that year Britain held the 'Plant a Tree in '73' year, in recognition of their importance.

As was stated in Chapter 1, Stuart Hall has argued that television programmes can be interpreted in certain ways, his so-called 'encoding/decoding' theory. He also claims that familiar images used in programmes are often interpreted in the correct way by the audience, because they remind viewers of real-life objects. Whilst the display which included the images of the human lungs was a static feature, rather than a television programme, the same basic rules apply. That is why today images of cancerous growths appear on cigarette packaging. People view these images for what they are, as they have real-life connotations. If someone from a heavily-polluted urban area saw those lungs they

2

²¹⁸ Hall, 'Encoding and Decoding in the Television Discourse', p. 11.

²¹⁶ Mills, 'Coal, Clean Air, and the Regulation of the Domestic Hearth', pp. 233-234.

Anon, 'Coventry to stage Clean Air Exhibition', *Coventry Evening Telegraph*, Saturday 12 January 1957, p. 12; Anon, "Down with Smoke" – Exhibition slogan', *Coventry Evening Telegraph*, Tuesday 5 February 1957, p. 8.

might be forced to question whether their lungs looked the same. Similarly, the fact two evergreen trees were displayed showed visitors to the exhibition real-life examples of the environmental effects of air pollution. These images therefore allowed people to directly connect air pollution with environmental problems (and health issues), driving home the message by making it personal and hard hitting.

In both Coventry and Sheffield, children were the main targets of the campaigns. Young people are and were seen as impressionable, and whilst it is unclear exactly why both cities targeted this section of society, their impressionability is a likely factor. Schools in Coventry were given pollution monitoring equipment and students took daily readings. These were then sent to the council. In 1960 a special conference was held in Coventry, especially for young people, and later became an annual event. The conference featured lectures, demonstrations, films, exhibitions and visits. To show how successful Coventry's clean air campaign was, when smog formed over the city in 1961, residents were prepared to deal with it, as many who had already 'pre-empted smoke control orders and voluntarily adopted cleaner burning fuels.' Whilst Coventry's first smokeless zone was established in 1951, this was in a mainly commercial area of the city with few residents. The clean air campaign, therefore, expanded and pushed for smokeless zones to be in force in other, residential areas of the city.'

When studying pressure groups, a group's effectiveness, as well as the wider effectiveness of the campaign of which the group is a part, often depends on whether it achieved its original objectives. In 1950s Britain, the clean air lobby succeeded in its aims by educating the public about air pollution and successfully

77

Mills, 'Coal, Clean Air, and the Regulation of the Domestic Hearth', pp. 235-236, quote appears on p. 236.

²²⁰ *Ibid.* p. 234.

pressuring the government to pass legislation to combat it. Although air pollution did not suddenly disappear overnight, the Clean Air Act of 1956 was the first such Act anywhere in the world, a milestone within post-war environmental protection as well as a major piece of legislation in its own right. Throughout the 1950s clean air exhibitions were held across the country to educate and inform local residents about air pollution.²²¹

The clean air campaign reached a crescendo in the 1950s after the London smog disaster, as the *Coventry Standard* noted in 1953. 'The general public,' it claimed, were 'becoming increasingly aware of the adverse effects of smoke pollution on health and amenity.'222 The final Report of the Committee on Air Pollution, published in November 1954, commented they were 'greatly impressed' whilst holding their inquiry by the public's 'demand for action' and how well informed they were.²²³ In their Annual Report of 1957-1958, the North Thames Gas Board described how popular clean air exhibitions were and that a 'mobile clean air exhibition designed for use in large exhibitions' was available for use by local authorities.²²⁴ The South Eastern Electricity Board received 2,000 enquiries at their stall at Croydon's Clean Air Exhibition in the year 1958.²²⁵ By 1970, of the 324 worst polluting authorities, 90 per cent had implemented or planned to implement smokeless zones. With this, domestic coal consumption fell from 37.5 million in 1956 to 19 million in 1970.²²⁶

Smog affected many industrial cities, in addition to those mentioned in detail here. Michael Allaby, an editor of *The Ecologist* and its special edition publication 'A Blueprint for Survival', described living in Birmingham when he was young, and that in winter, 'it was not uncommon to be sent home from school because of smog' and that sometimes you could not see your hand if held out in front of you. Interview with Michael Allaby, 30 April 2012.

Anon, 'City Council Proposes to Extend Smokeless Zone: M.O.H. on "Difficult Problem", Coventry Standard, Friday 2 October 1953, p. 5.

²²³ Committee on Air Pollution – Report, November 1954 (Cmnd. 9322), p. 11.

North Thames Gas Board Annual Report and Accounts, 31 March 1958, p. 16.

South Eastern Electricity Board Annual Report and Accounts, 31 March 1959, p. 30.

²²⁶ Mills, 'Coal, Clean Air, and the Regulation of the Domestic Health', pp. 224-226.

Those scholars writing about the 1970s environmental movement often fail to include a detailed analysis of the clean air campaign of the 1950s or the extent to which the environment was a central theme.²²⁷ Nor do they mention pressure groups such as the NSAS which were involved in informing the public about air pollution and its effect on the environment and nature. They have often also ignored other forms of pollution which people were concerned with at the time, and rarely mention these issues as influences on the environmentalism of the 1970s.

Whilst it was not possible to interview anyone who was involved with the National Smoke Abatement Society or the clean air campaigns, the two case studies focusing on Coventry and Sheffield do reveal a growing environmental awareness and did inform the public of atmospheric pollution. Although traditionally, arguments about air pollution have highlighted the health problems associated with smog and other air pollutants, after the great London smog disaster of 1952, arguments were made about the environmental effects of air pollution as well as the health effects. The National Smoke Abatement Society, the main pressure group involved in the clean air campaign, lobbied the government and its members to push for legislation to curb air pollution, which was achieved in the Clean Air Act of 1956.

²²⁷ For instance, Veldman only discusses the National Smoke Abatement Society in passing, in one sentence at the end of her chapter on post-war Britain – see Veldman, Fantasy, the Bomb and the Greening of Britain, p. 244; Adam Lent makes no mention of it in his analysis on protest groups in Britain (and mentions only two pages on pre-1970 pressure groups, focusing on the Conservation Society and briefly discussing the World Wildlife Fund) - see Adam Lent, British Social Movements Since 1945: Sex, Colour, Power and Peace (Basingstoke: Palgrave Macmillan, 2001), pp. 26-27. Christopher Rootes does not include the National Smoke Abatement Society in any of his works, though he does briefly describe air pollution in one piece - see Rootes, 'Environmental NGOs and the Environmental Movement in England', p. 207. Sheail only includes discussion of air pollution on two pages of his British environmental history study. See Sheail, An Environmental History of Twentieth Century Britain, pp. 248-250.

After the smog disaster the National Smoke Abatement Society changed its name to the National Society for Clean Air. 228 This group was still concerned with air pollution but, significantly, it laid increasing emphasis on that from motor vehicles. To prove how far clean air had come, in 1970 an article in *The Times* described how birds were flocking back into central London, areas which previously had seen an absence of bird life due to air pollution. 229 Whilst the release of sulphur emissions was not regulated until 1972, emissions in the capital fell by 90 per cent mainly because of the shift in fuel from coal to gas/electric heating appliances. 'After the 1960s, London's air quality suffered more from tailpipe exhausts than from smokestack and chimney emissions. Ironically, the clearer air after the mid-1950s allowed more sunshine to penetrate to the city streets, where it reacted with tailpipe emissions to form photochemical smog.'230 In the Committee on Air Pollution's 1954 Report, it was noted that air pollution from the exhausts of motor vehicles had increased as more people were able to purchase them, but the 'contribution of exhaust gases to the total volume of air pollution is still relatively small.'231 This changed after the Clean Air Act, and became the dominant cause of air pollution.

In 1957, a new face mask was even designed to combat smog, to 'introduce sufficient ammonia into the air inhaled by the wearer to neutralise the acid components' of air pollution.²³² NHS face masks were also distributed by the government to Londoners during the great London smog; these were replaced

²²⁸ The NSAS changed its name to the National Society for Clean Air in 1958. See Sanderson, 'National Smoke Abatement Society', p. 236. See also the North Western Electricity Board Report and Accounts, 31 March 1958, p. 9; Report of the Ministry of Housing and Local Government, 1959 (Cmnd. 1027), p. 10.

²²⁹ Tony Aldous, 'Clean air lures birds back to capital', *The Times*, Friday 3 April 1970, p. 3. ²³⁰ John McNeill, *Something New Under the Sun: An Environmental History of the Twentieth Century* (London: Penguin, 2001), p. 66.

Committee on Air Pollution – Report, November 1954 (Cmnd. 9322), p. 20.

Department of Scientific and Industrial Research, Annual Report for the Year 1956-1957 (Cmnd. 428), p. 20.

with gas masks in the 1970s by clean air campaigners. Commitment wore gas masks during their demonstration about air pollution from vehicles in central London. Whilst it is unclear whether any Commitment member had been aware of the face masks, it does reflect both the ingenuity and creativity of Commitment and a changing attitude towards environmental problems. The NHS masks of the London smog were distributed as a preventative measure by the government to protect people from the smog; in Commitment's demonstration some twenty years later, gas masks were used by the group to symbolise dirty air. They were not distributed by the government; rather Commitment were criticising the government for lack of control over pollution from motor vehicles. This is an example of how the environmental governance of the post-war period moved aside to more grassroots-focused environmental protests of the 1970s.

As evidence of the continued significance of the smog disaster, in December 2012, the sixtieth anniversary of the disaster, Clear World Media live tweeted over five days about it.²³³ These tweets were retweeted 460 times. 'This meant that tweets about the Great Smog appeared just under 9 million times for almost 1.5 million people. 234 They were also mentioned 303 times in 220 different locations across the world. 235

Air pollution issues were momentous in the growth of environmental concerns in Britain but Christopher Rootes' 'broad networks' did not form between air pollution and nature conservation groups and so this period cannot be described as evidence of the environmental movement existing. Rather, groups

²³³ Clear World Media is a social media enterprise with a mission 'to inspire the world to transition to a sustainable, more equitable and fun place to live' http://www.clearworldmedia.com/aboutus – accessed electronically 12 August 2013.
²³⁴ Clear World Media, '#GreatSmog Post Mortem' –

http://www.clearworldmedia.com/post/37623921552/greatsmog-post-mortem - accessed electronically 27 May 2013. 235 *Ibid.*

associated with clean air and nature conservation formed part of a nascent environmental lobby. Nevertheless both issues increased the public's environmental awareness in this period, although they did so in different ways and with little correlation between the two. The inclusion of the great smog in this thesis is significant because it not only involves analysing the disaster from an environmental stance, one which has not been done in detail before (much of the commentary on this event is from a history of medicine perspective); it is important because pollution became a common issue with environmental groups in the 1970s, with both Commitment and SOC'EM (Chapter 5) including air pollution issues in their campaigns. Clean air became part of a wider environmental consensus in the political establishment in the 1970s.

River Pollution and 'pollution of the ground' (the anti-litter campaign)

With the creation of the National Parks system, more people than ever were inspired to go into the countryside and experience nature first hand. With this increased access and awareness of conservation issues, however, concern was raised in some circles about the effect people had on the environment. River pollution and litter were of particular concern. Whilst the pollution of rivers from industry was nothing new, now more people had access to the countryside they witnessed the problems at first-hand, and this was reflected in the increased media coverage. 237 The NC also became involved with the issue, as it affected fish stocks and other wildlife. As Anthony Grant commented in the House of Commons

http://hansard.millbanksystems.com/commons/1957/apr/12/litter-

on river pollution in post-war Britain.

²³⁶ The phrase 'pollution of the ground' was a reference to litter, used by Rupert Speir in 1957 in the House of Commons. See Rupert Speir, House of Commons Debate, 'Litter Bill', 12 April 1957, vol 568 cc1444-503 -

bill#S5CV0568P0 19570412 HOC 55 – accessed electronically 22 March 2013.

237 See John Sheail, "Never Again": Pollution and the Management of Watercourses in Post-war Britain', Journal of Contemporary History, 33:1 (1998), pp. 117-134 for information

in 1952, by the early 1950s there was 'growing concern about the frequent and heavy pollution of beaches' and waterways in many parts of the country.²³⁸

Sewage and pollution had been highlighted by the *Daily Mirror* as early as 1947. An article in the newspaper claimed that as increasing numbers of people visited the countryside each year, some were put off by pollution. Codfish in Morecambe Bay were found with empty eye sockets, their eyes being eaten away by pollutants. It also warned that the River Severn would soon be devoid of salmon unless something was done to quash the levels of pollutants in the river. Since the *Daily Mirror* was the biggest selling newspaper in Britain by the late 1960s, it is significant that this article appeared in that newspaper. As the article comments that more people were visiting the countryside, this was an indication that the National Parks Act was proving successful; it also suggests a general awareness of pollution. This article appeared as a public consciousness was growing with relation to environmental problems; this consciousness leading to the appearance of the environmental movement in the 1970s.

Similarly, the same year as the *Daily Mirror* article, *The Times* stated that domestic and factory waste was damaging water quality and that 'Shakespeare's Avon' was almost entirely uninhabitable due to pollution levels.²⁴¹ Harold Davies, MP for Leek, claimed in Parliament that river pollution had become 'a dominant thing in British life,' with many of the public who enjoy the countryside aghast at the levels of pollution in the nation's rivers. John Edwards, MP for Blackburn (until

²³⁸ Anthony Grant, House of Commons Debate, 'Oil in Navigable Waters Bill', 30 October 1970, vol 805 cc572-616 – http://hansard.millbanksystems.com/commons/1970/oct/30/oil-in-navigable-waters-bill#S5CV0805P0_19701030_HOC_30 – accessed electronically 26 October 2013.

²³⁹ Anon, 'Yes, it's Lovely – But it STINKS!', *Daily Mirror*, Saturday 28 June 1947, p. 2.
²⁴⁰ Chris Horrie, *Tabloid Nation: From the Birth of the Daily Mirror to the Death of the Tabloid* (London: André Deutsch, 2003), p. 247 (specifically mentions the *Daily Mirror*'s readership peaking at 5.25 million in 1967).

Anon, 'Pollution of Rivers – Shakespeare's Avon as Industrial Sewer', *The Times*, Monday 30 June 1947, p. 3.

1950, Blackburn had two MPs), responded that the government viewed river pollution with 'the gravest concern.'²⁴² This comment would seem to imply that the government had a genuine interest in pollution-prevention. In the 1970s, pollution became a buzz word for everything wrong with the environment; *Doomwatch* and *Doctor Who* both featured stories about it, Harold Wilson had mentioned it in 1969 in his Labour Party conference speech and a Royal Commission on Environmental Pollution was established.²⁴³ Yet here, as early as 1947, the government expressed alarm at the pollution of rivers. Those studying the environmentalism of the 1970s have often overlooked this earlier concern.²⁴⁴

The condition of fisheries was also a source of worry. As much as a third of all plant and fish life in rivers was dying or dead as a direct result of pollution.²⁴⁵ In the Buckland Lectures, which were held annually and were generally concerned with a fisheries topic, H.D. Turing, the lecturer in 1950, referred to:

the increasing public interest in fisheries and the country's rivers ... Whereas previously a "holocaust" in a local river might, at most, be a three-day wonder in the local press, there was now much greater understanding that fisheries acted as a sort of barometer, by which the condition of the river might be

²⁴² Anon, 'House of Commons', *The Times*, Thursday 17 July 1947, p. 6. See Harold Leek, House of Commons Debate, 'River Pollution', 16 July 1947, vol 440 cc556-64 – http://hansard.millbanksystems.com/commons/1947/jul/16/river-pollution#S5CV0440P0_19470716_HOC_591 – accessed electronically 27 August 2013; John Edwards, House of Commons Debate, 'River Pollution', 16 July 1947, vol 440 cc556-64 – http://hansard.millbanksystems.com/commons/1947/jul/16/river-pollution#S5CV0440P0_19470716_HOC_599 – accessed electronically 27 August 2013.

See Park, *History of the Conservation Movement in Britain*, p. 22. See also Harold

²⁴³ See Park, *History of the Conservation Movement in Britain*, p. 22. See also Harold Wilson, House of Commons Debate, 'Environmental Pollution', 11 December 1969, vol 793 cc638-45 – <a href="http://hansard.millbanksystems.com/commons/1969/dec/11/environmental-pollution-royal-commission-1#S5CV0793P0_19691211_HOC_209 – accessed electronically 23 July 2013.

²⁴⁴ For instance Christopher Christop

For instance, Christopher Rootes fails to mention in in his work, and nor do other scholars writing about environmentalism such as David Pepper, *The Rootes of Modern Environmentalism* (London: Croom Helm, 1994), nor in his work *Modern Environmentalism:* An Introduction (London: Routledge, 1996). Adam Lent also fails to include any discussion of it.
 Harold Leek, House of Commons Debate, 'River Pollution', 16 July 1947, vol 440 cc556-

Harold Leek, House of Commons Debate, 'River Pollution', 16 July 1947, vol 440 cc556-64 – http://hansard.millbanksystems.com/commons/1947/jul/16/river-pollution#S5CV0440P0_19470716_HOC_591 – accessed electronically 27 August 2013.

gauged. If fish could not live in the waters, they were not fit for human use either.²⁴⁶

As Turing noted in his speech, public interest had increased in rivers and fisheries. The Rivers (Prevention of Pollution) Act of 1951 is representative of this increased consciousness and of the environmental governance of the period. The Act sought to mitigate river pollution and the fact that it was passed so soon after the lecture, indicates not only that the government were aware of river pollution but also that there was a public concern for this, forcing the government to legislate. The Act advocated that the government maintain and restore 'the wholesomeness of ... rivers and other inland or coastal waters.' It 'created the offence of causing or knowingly permitting any poisonous, noxious or polluting matter to enter a stream.' The 1961 Rivers (Prevention of Pollution) Act extended the 1951 Act's powers, and established stronger penalties against river pollution. The Times described how the public were 'heartily sick' of dirty rivers and this Act was welcomed by many. Concern about river pollution fed into wider ideas about nature conservation, propagated through television programmes such as *Look* and other media.

In addition to the nation's rivers, concern about the pollution grew as

National Parks saw an increase in visitors. This pollution was in the form of litter.

Littering might not initially appear germane to anything environmental; however litter (and waste more generally) is a product produced by humans which damages

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²⁴⁶ Sheail, "Never Again", pp. 117, 130.

Anon, 'Bevan joins Tories in river Bill protest', *Daily Mirror*, Friday 1 June 1951, p. 7; Rivers (Prevention of Pollution) Act, 1951, Chapter 64 14 and 15 Geo 6 — http://www.legislation.gov.uk/ukpga/Geo6/14-15/64/introduction— accessed electronically 13 March 2013. This Act was further strengthened ten years later — Rivers (Prevention of Pollution) Act, 1961, Chapter 50 9 and 10 Eliz 2 — http://www.legislation.gov.uk/ukpga/Eliz2/9-10/50/introduction— accessed electronically 25 July 2013.

Susan Wolf & Neil Stanley, Wolf and Stanley on Environment Law (Oxford: Routledge, 2011), Fifth Edition, p. 129.

Anon, 'Dirty Rivers', *The Times*, Friday 17 November 1950, p. 5.

the plants and animals that live there. One only has to look at the Great Pacific Garbage Patch, where rubbish which has amassed is kept in a swirling vortex in the middle of the Pacific Ocean, to see the effects on the environment today.

Toxins leech out of rubbish and into the water, absorbed by fish and other marine life. 250 These toxins then enter the bodies of other creatures and humans who eat the infected hosts. In 1962, Rachel Carson warned of the incidence of pesticides entering the human food chain by being absorbed by other creatures (Chapter 3). Although this was not necessarily used in arguments at the time about litter, it does suggest why the anti-litter campaign of 1950s Britain should be included here. Litter caused pollution of rivers and waterways as well as the countryside, affecting both plant and animal life. Litter affected the physical environment, the health of the environment, and contributes to public health issues. In addition, the Royal Commission on Environmental Pollution considered litter to be a type of pollutant in their First Report of February 1971. 251

the natural world. It affects the health of humans and of the natural world, including

Throughout the 1950s, the British government ran anti-litter campaigns to educate the public in good practice, culminating in the Litter Act of 1958 which for the first time made it an offence to drop litter.²⁵² In the year following the Act, which came into operation on 7 August 1958, there were over 1,000 prosecutions and the National Parks Commission noted that 'the publicity given to these cases in the

²⁵² The National Parks Commission, Ninth Annual Report ,1958, p. 18.

²⁵⁰ For more on the Great Pacific Garbage Patch see the National Geographic's webpages: http://education.nationalgeographic.co.uk/education/encyclopedia/great-pacific-garbage-patch/?ar_a=1 – accessed electronically 3 February 2014.

²⁵¹ Royal Commission on Environmental Pollution, First Report, pp. 8-9. Indeed, the

Commission on Environmental Pollution, First Report, pp. 8-9. Indeed, the Commission interpreted pollution broadly, as 'covering any introduction by man into the environment of substances or energy liable to cause hazards to human health, harm to living resources and ecological systems, damage to structures or amenity, or interference with legitimate uses of the environment' which includes litter, as this can harm 'living resources' such as animals or plants – see Royal Commission on Environmental Pollution – http://webarchive.nationalarchives.gov.uk/20060820083451/http://rcep.org.uk/about.htm#1 – accessed electronically 7 February 2014. See also Figure 1 in this chapter for a poster which highlights the effect of litter on animals.

Press, reinforced by the combined efforts of all those contributing to the national campaign, is slowly arousing the public conscience. Although much educational work still lies ahead, there is beginning to emerge an understanding' regarding why it was wrong to drop litter. ²⁵³ One memorable poster, produced as part of the national campaign, depicted a red squirrel, which some regarded as a 'notoriously untidy animal.'254 The red squirrel was selected for the poster 'because it is a delightful small creature which reminds people of the country.²⁵⁵ The poster's slogan read, "When in the country, don't forget ... take your litter home." This message was echoed by the National Parks Commission who described dropping litter as an 'evil,' selfish habit and that litter blights the landscape and endangers both people and animals.²⁵⁷ The Commission produced the poster 'Respect for Life of the Countryside' at the end of the decade. This poster (Figure 1) was distributed to various community groups.²⁵⁸ It portrays an adult cow helping its calf who had eaten some litter, with a farmer looking on. The caption states: 'Litter is dangerous. Tins and bottles left in the countryside are dangerous. They may lame animals for life, or cut them so badly they have to be destroyed. All litter is disgusting, SO TAKE YOUR LITTER HOME. 259 Posters depicting various

²⁵³ The National Parks Commission, Tenth Annual Report, 1959, p. 20.

²⁵⁴ Graeme Finlay, House of Commons Debate, 'Anti-litter Campaign Poster', 30 April 1957, vol 569 cc12-3 – http://hansard.millbanksystems.com/commons/1957/apr/30/anti-litter-campaign-poster#S5CV0569P0 19570430 HOC 100 – accessed electronically 22 May 2013.

²⁵⁵ Reginald Bevins, House of Commons Debate, 'Anti-litter Campaign Poster', 30 April 1957, vol 569 cc12-3 – http://hansard.millbanksystems.com/commons/1957/apr/30/anti-litter-campaign-poster#S5CV0569P0_19570430_HOC_101 – accessed electronically 22 May 2013.

²⁵⁶ Lord Mancroft, House of Lords Debate, 'Empty Beer Cans & Litter', 25 June 1957, vol 205 cc104-6 – http://hansard.millbanksystems.com/lords/1957/jun/25/empty-beer-cans-and-litter#S5LV0205P0_19570625_HOL_13 – accessed electronically 22 May 2013.

²⁵⁷ The National Parks Commission, Ninth Annual Report, 1958, p. 18.

²⁵⁸ The National Parks Commission worked with the BBC to get its Countryside Code message 'to a very large audience' – see The National Parks Commission, Eighteenth Annual Report, 1967, p. 31.

Annual Report, 1967, p. 31.

259 Poster 1 'Respect the Life of the Countryside', Youth Movement Archives/Woodcraft Folk, YMA/WF/73/2/1/15, from LSE Library's collections. Please note, although the date of the poster is vague (end of 1950s), the archives could not provide a more specific date when asked. LSE have kindly allowed this poster to be printed in this thesis. The Government also have a website on Crown copyright, which this poster would fall under:

messages which dealt with nature conservation and the countryside code were in high demand from the National Parks Commission. In 1961, for example, almost 42,000 posters were sent to schools and youth and community organisations, in addition to libraries, Chambers of Commerce and Trade and to Post Offices.²⁶⁰ With regards to the 'Respect for Life of the Countryside' poster, this was circulated across the country and was also displayed in Post Offices, generating 'considerable interest' in the press. The demand for this poster was so great that the Commission soon ran out of their stock of 50,000 and had to print a further 15,000.²⁶¹

http://www.nationalarchives.gov.uk/doc/open-government-licence/version/3/. However, since it is difficult to date the poster, and there is a fifty-year rule, the poster might well be out of copyright. It seems to be mentioned in 1960, which would mean its copyright has expired. See footnote 261, below.

260 The National Parks Commission, Twelfth Annual Report, 1961, p. 23.

²⁶¹ The National Parks Commission, Eleventh Annual Report, 1960, p. 21.

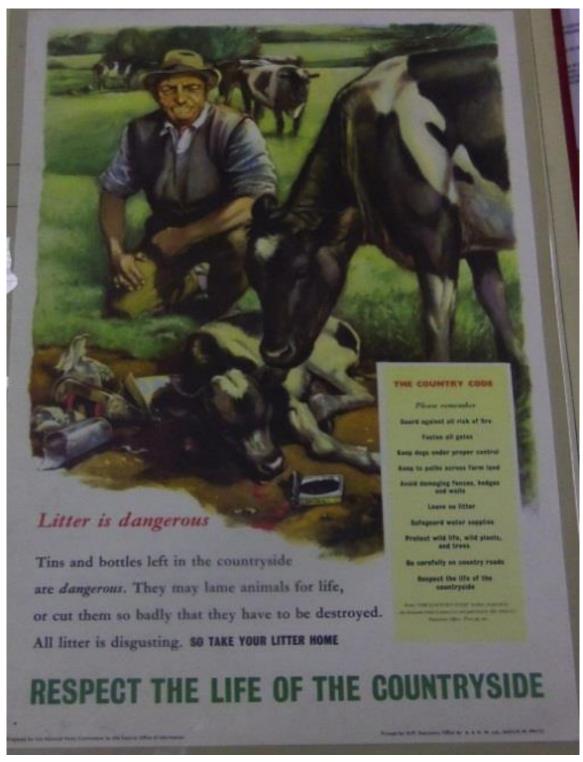


Figure 1 – 'Respect the Life of the Countryside'

Stickers with the slogan 'Take Your Littler Home – Protect the Countryside' were designed with 20,000 distributed to the London Transport Executive for

display on their vehicles and a further 20,000 sent to local authorities who operated bus and coach services within National Parks. ²⁶² The 1958 Annual Report of the Commission described how, whilst it was difficult to assess fully the effect of a long term campaign such as anti-littering, 'it does seem to us both from personal observation, and from reports in the Press, that the campaign is making its mark and that there is, in general, a much greater awareness of the need to exercise self-discipline in the tidy disposal of unwanted rubbish.' This message about protecting the countryside was broadcast regularly on television, with the Commission noting in 1961 that television was an 'important medium' with which to get its message across 'to the public at large' which underlines the growing role of television in British society. ²⁶⁴

During the 1950s, the Commission worked with the government, which ran 'an imaginative campaign run by the Central Office of Information' and which proved to be popular and appealing. As early as 1953, politicians claimed that this campaign had been a 'great success in the countryside. It was argued that the same campaign should take place in urban areas, and that education of young people was paramount to preventing littering. The National Parks Commission's work and that of the government both fed into the activities of the 'Keep Britain Tidy' group. One million members and 30 organisations were affiliated to the group and members worked with youth organisations, local amenity groups and

²⁶² The National Parks Commission, Ninth Annual Report, 1958, p. 18.

²⁶³ Ibid.

²⁶⁴ The National Parks Commission, Twelfth Annual Report, 1961, p. 24.

²⁶⁵ Anon, 'Tidying Up', *The Times*, Monday 27 February 1956, p. 11.

David Eccles, House of Commons Debate, 'London Parks (Litter)', 16 June 1953, vol 516 cc710-1 – http://hansard.millbanksystems.com/commons/1953/jun/16/london-parks-litter#S5CV0516P0_19530616_HOC_55 – accessed electronically 22 May 2013.

²⁶⁷ David Eccles, House of Commons Debate, 'London Parks (Litter)', 16 June 1953, vol 516 cc710-1 – http://hansard.millbanksystems.com/commons/1953/jun/16/london-parks-litter#S5CV0516P0 19530616 HOC 58 – accessed electronically 22 May 2013.

²⁶⁸ See 'Keen Britain Tidy' website - http://www.london.parks-litter#S5CV0516P0 19530616 HOC 58 – accessed electronically 22 May 2013.

²⁶⁸ See 'Keep Britain Tidy' website – http://www.keepbritaintidy.org/OurHistory/607 – for more information, accessed electronically 3 July 2013.

local authorities, educating people in anti-litter practices to reduce the amount of litter left in the countryside. ²⁶⁹ Many voluntary organisations also became involved in the anti-litter campaign, and some manufacturers reduced the packaging in their products. ²⁷⁰ It was believed that education should begin at school with children educated in how to care for the environment and the dangers and problems associated with dropping litter. In order to achieve this, 'Keep Britain Tidy' launched over 2,000 school committees, run by students, and held competitions and children were filmed picking up litter. The group encouraged citizens to tidy up themselves, as well as lobbying elected officials to act. ²⁷¹ A public service video from 1959 entitled *I Am a Litter Basket* also encouraged people to use appropriate waste disposal infrastructure such as dustbins, rather than littering. ²⁷² 'Keep Britain Tidy' was a public interest pressure group which, like the NSAS, had many different amenity groups affiliated to it and lobbied the government to legislate on their respective issues. Both also skilfully exploited the media and both were successful in their aims. ²⁷³

The education of young people about litter continued into the 1970s, with BBC Schools Television tackling this issue. In *Around Scotland: Looking After Your Environment*, aimed at 9-12 year olds, different environmental themes were discussed each week, one of which was 'Project Clean Up.' This involved students from Inverkeithing Primary School cleaning up their local beach. Another episode

²⁶⁹ Anon, 'Tidying Up', *The Times*, Monday 27 February 1956, p. 11.

J.E.B. Hill, House of Commons Debate, 'Litter Bill', 2 August 1956, vol 557 cc1753-60 – http://hansard.millbanksystems.com/commons/1956/aug/02/litter#S5CV0557P0_19560802 HOC 489 – accessed electronically 22 May 2013.

HOC 489 – accessed electronically 22 May 2013.

271 Elizabeth Brunner, 'Litter tide rising ever higher', *The Times*, Tuesday 17 March, 1964, p. 11.

<sup>11.
&</sup>lt;sup>272</sup> British Transport Films, *I Am a Litter Basket* (1959), film from the British Film Institute, 9 minutes – https://www.bfi.org.uk/inview/title/6443 – accessed electronically 6 November 2013.

<sup>2013.

273</sup> Anon, 'Intensified Campaign Against Litter', *The Times*, Saturday 11 May 1957, p. 3. See also House of Commons Debate, 'Litter', 10 May 1957, vol 569 cc91-2W – http://hansard.millbanksystems.com/written_answers/1957/may/10/litter – accessed electronically 3 July 1957.

involved urban waste and litter in town centres.²⁷⁴ The anti-litter campaign's significance stems from its part as an influence on attitudes towards the environment in the 1970s. As with the Nature Conservancy or the NSAS, it did not form the complex broad networks which were part of the 1970s movement; instead it provided another example within the consciousness of society about the importance of protecting the natural world, about pollution in the countryside, and even about the disruption of eco-systems when foreign objects enter it.

Furthermore, even if compared with the Council for Nature, its role was lesser in developing environmental awareness, as with many of the case studies which appear in this work, the anti-litter campaign had influences in later years, and so is important to consider its role within post-war conservationism.

At the beginning of the 1970s, for instance, Friends of the Earth took up the mantle of anti-littering when they launched their campaign against Cadbury-Schweppes. This company had recently adopted a new policy of producing non-returnable bottles for their drinks. Friends of the Earth directed their focus on this policy whilst framing it within wider concern about waste products and litter more generally. The difference between the campaign in the 1950s and that of the early 1970s was not only in terms of scope (the 1950s campaign was a government-led moderate response, whereas in the 1970s, Friends of the Earth's campaign was more member/activist-led radical response; this was reflected in other pressure groups such as Commitment). The difference was also in terms of dimension — Friends of the Earth's arguments included a broader scope, which the 1950s one

²⁷⁴ 'Project Clean Up' and 'Cleaning up the City', *Around Scotland: Looking After Your Environment* (1973-1976), SC118/270/1, WAC.

did not. Rather than focusing on those who litter, Friends of the Earth saw the problem being the manufacturers, the producers of the litter in the first place.²⁷⁵

Whilst 'Keep Britain Tidy' and associated issues with litter might not appear to be directly 'environmental' in its nature, through foreshadowing Friends of the Earth in the 1970s and using the environment as a frame of reference for the antilitter campaign, this issue can be considered in part a precursor to 1970s environmentalism. The first episode of *Doomwatch* which aired in February 1970 also touched on the issue of litter. Entitled 'The Plastic Eaters,' it focused on a virus which could eat through plastic, making environmental waste a thing of the past (see Chapter 5). Similarly, one of the films played to viewers in the *Doctor Who* story 'Invasion of the Dinosaurs' discussed the pollution of waterways with litter (also in Chapter 5).

In addition, with some pressure groups in the 1970s (such as SOC'EM) wanting the 'betterment' of the localities in which they were based, this was not so different to 'Keep Britain Tidy' advocating the proper disposal of litter to keep people's pride in Britain.²⁷⁶ In the House of Commons, in 1957, Rupert Speir, MP, made a direct connection between air pollution and anti-littering legislation, and described litter as 'pollution of the ground':

Recently Parliament passed into law an Act providing for measures to be taken to penalise those responsible for air pollution. I feel that Parliament has put the cart before the horse, because it will be necessary to spend thousands, if not millions, of pounds on special equipment to take measures

93

²⁷⁵ See Timothy Cooper, 'War on Waste?: The Politics of Waste and Recycling in Post-War Britain, 1950-1975', *Capitalism Nature Socialism*, 20:4 (2009), p. 60.

See the webpages of 'Keep Britain Tidy' for mention of this – http://www.keepbritaintidy.org/ourhistory/607 – accessed electronically 3 July 2013.

to prevent air pollution, whereas this little Measure to prevent pollution of the ground could be put into effect with scarcely any expenditure.²⁷⁷

Speir also tied public health into this anti-litter campaign, by claiming people had said to him that there was legislation in place to 'stop the spitter; cannot we do the same for litter?' He commented that the public should be made 'as allergic to litter as they are now to the spitter. We ought to create an atmosphere in which people feel that the scattering of litter is something which just is not done.'278 He further placed litter in a context within which later environmental pressure groups would work, describing the age as one of the age of packaging and bottles, in the 'wrapping age' (linking with Friends of the Earth's protest in 1971) and the motor car (with Commitment's protest again cars in central London, also that same year). Many bodies supported environmental governance in the area of littering, he commented, especially organisation like the National Trust, the Federation of Women's Institutes and similar groups. He also made the distinction between urban and rural areas, stating that both were blighted by rubbish, but that in the countryside it might be more obvious. A report from Dartmoor National Parks Committee which he cited (presumably the report was produced in 1956 or 1957). had claimed that litter in that National Park was a grave concern, especially after the summer months had seen a large number of visitors. Litter on beaches can cause particular problems to human health, through cuts and bruises as well as more serious issues.²⁷⁹ With these later references to litter and waste, therefore, it seems only right to include some discussion of the anti-litter campaign within 1950s Britain, especially as it fed into wider issues of pollution, which dominated the period.

²⁷⁷ Rupert Speir, House of Commons Debate, 'Litter Bill', 12 April 1957, vol 568 cc1444-503

⁻ http://hansard.millbanksystems.com/commons/1957/apr/12/litter-

bill#S5CV0568P0_19570412_HOC_55 – accessed electronically 22 May 2013. 278 *Ibid*.

²⁷⁹ *Ibid.* See also The National Parks Commission, Sixth Annual Report, 1955, p. 17, where Dartmoor and litter is mentioned.

Council for Nature and early nature television programmes

In 1958, as well as the Litter Act becoming law, another environmental body, the Council for Nature, was established. It sought to co-ordinate voluntary bodies in the UK concerned with nature conservation, and to lobby the government when required on behalf of these bodies. It also aimed to increase the involvement of young people in nature conservation. Within four years it had affiliated nearly 300 groups and represented over 80,000 individual members. 280 The establishment of the Council is some indication that environmental awareness was growing in Britain, and that people wanted to know more. The Council 'made a reality of the force of public opinion,' which had existed for a while but had never been articulated and effective 'except in isolated controversies.'281 The importance of the Council was that it allowed the Nature Conservancy to continue with its scientific work, whilst it could coordinate all the education ambitions of the NC and similar organisations. It brought popular pressure to bear on issues such as the use of pesticides and established the Conservation Volunteers (formerly the British Trust for Conservation Volunteers, BTCV and originally called the Conservation Corps in 1959). By 1972, members of the corps were spending their weekends working on conservation projects and over the summer engaged were in longer term residential tasks. There were plenty of volunteers, although the age limit was over 16 years old. However some school groups working on conservation projects had also been established. 282 The Council provided 'an outlet for the keenness of young people ... to do something with their own hands for conservation' as did the establishment of the Conservation Corps. With the emergence of the Council and the Corps, an environmental consciousness was developing 'both in breadth and

²⁸⁰ Evans, A History of Nature Conservation in Britain, pp. 98-99.

Nicholson, *The Environmental Revolution*, p. 183.

²⁸² Colin Ball, 'A corps camps out to help conserve the countryside: Chance for schools to fight pollution', *The Guardian*, 5 June 1972, p. 12.

in depth,' further witnessed in 'the market spurt in University interest and activity in ecological research.'283

The Council could now manage lots of different conservation groups, some of which had previously had no idea as to what other groups were doing. ²⁸⁴

Through this central body, therefore, a more streamlined nature conservation programme could be initiated and run. Whilst no complex broad networks formed between the Council and the NSAS (and, like the latter group, the Council could be seen as part of the nascent environmental lobby), its creation was another landmark in the growth of environmental awareness, and played a significant role in the development of conservationism after the war.

In 1959, the Council established its Intelligence Unit to collect and collate information from different bodies, in order to respond to enquiries about their work. They also employed a Films Officer to assist with natural history films and to provide information for them. This Unit provided newspapers, radio and television news outlets with a steady flow of stories. As the Unit was funded by the BBC, a close relationship between both bodies was established (one which already existed between the BBC and the Nature Conservancy). Even before the Council had been formally established, however, the BBC broadcast radio and television programmes about the natural world. As Max Nicholson states, 'No appraisal of the advance of environmental conservation' in Britain 'should fail to pay tribute to the outstanding, and indeed decisive, contribution of this group [the media] to the rapid acceptance of the message of the movement, and indeed to

²⁸³ The Nature Conservancy Annual Report, 1959, p. 2, FT6/9, TNA.

John Hillaby, 'Veterans of nature conservation', *The Guardian*, 23 December 1959, p. 5.

Nicholson, *The Environmental Revolution*, p. 183.

²⁸⁶ The Nature Conservancy Annual Report, 1959, p. 77, FT6/9, TNA.

²⁸⁷ See the early Annual Reports of the Nature Conservancy from years 1954 onwards.

the enrichment of the message itself.'²⁸⁸ Yet many scholars writing about the environmental movement in Britain do just that – they ignore the role of the media in influencing people's attitudes to, and awareness of the natural world.²⁸⁹ For instance, in 1957, the Annual Report of the Nature Conservancy commented on a series of lectures held in Edinburgh broadcast on the BBC. These lectures were held because of the 'increasing general interest in conservation.' Many significant members of the early nature conservation movement in Britain, including Charles Elton, Nicholson and others, gave papers.²⁹⁰

As supported by the Annual Reports of the Nature Conservancy, media outlets produced an increasing amount of natural history and conservation programming as the decade progressed. Sometimes the Council and the Nature Conservancy were involved in or assisted with research for these programmes, providing a greater number of sources from which people could become influenced. The Annual Report of 1956 describes the involvement of the NC with the BBC, with the former providing speakers and experts for programmes broadcast by the latter. These programmes included 'Children's Hour' (*Nature Parliament*), 'Women's Hour' and so on. These programmes, the Report notes commanded large audiences.²⁹¹

Whilst some early programmes were broadcast on the radio, many naturalists worked across both radio and television media presenting a variety of programmes. Early television programmes, whilst not stellar examples of natural history output, proved nevertheless popular, such as one which featured George

²⁸⁸ Nicholson, *The New Environmental Age*, p. 80.

For example Veldman does not mention anything about television programmes pre-1970 in her analysis in *Fantasy, the Bomb and the Greening of Britain*. Nor does Adam Lent is his work on *British Social Movements*. Whilst Christopher Rootes does include a reference to it, this is only a sentence – see Rootes, 'Environmental NGOs and the Environmental Movement in England', p. 207.

²⁹⁰ The Nature Conservancy Annual Report, 1957, p. 75, FT6/7, TNA. ²⁹¹ The Nature Conservancy Annual Report, 1956, p. 53, FT6/6, TNA.

Cansdale, superintendent of London Zoo, who would bring animals into the BBC studios and talk about them. As the BBC had a duty to inform as well as entertain, gradually new programmes with a more natural history focus began to be produced. One such new series, *The Pattern of Animals* aired with three episodes focusing on the different traits of animals. The series was very popular and led to similar programmes being commissioned. It was decided that television viewers needed to be shown the natural habitats of animals and how they live and adapt in their natural environment, so audiences could understand more about the world within which animals lived, so that they could be conserved.²⁹²

As the medium of television grew in the 1950s, the Nature Conservancy's reports began to include information on television programmes which they were involved with, as well as those about general nature conservation. In the Annual Report of 1954, for instance, it was stated that a series produced by the BBC featured research done by the Conservancy. From 1956, the 'Education and Information' sections of their reports included a subsection entitled 'Press, Radio and Television.' In 1957, the 'Radio and Television' part was dropped and changed to 'Broadcasting'; the subsection was then titled 'Press and Broadcasting.' This perhaps signifies the dominance that television was beginning to gain over radio. Before 1956, these issues had been included without a separate heading. The use of this particular subheading supports the argument that television and other media were increasing in prominence in society. The Conservancy obviously thought these were important enough and discussing conservation issues often enough to warrant their own heading.

²⁹² Attenborough, *Life on Air*, pp. 31-33.

The Nature Conservancy Annual Report, 1954, p. 31, FT6/4, TNA.

The Nature Conservancy Annual Report, 1956, p. 53, FT6/6, TNA.

²⁹⁵ The Nature Conservancy Annual Report, 1957, p. 75, FT6/7, TNA.

When people watched or listened to BBC nature programmes, they became increasingly conscious of the natural environment. Nature television programmes such as Look have 'proved a major British contribution to the worldwide movement,' and without programmes such as these, the environmental movement 'would be much less enthusiastic and well informed, and also more narrowly limited. They are vividly perceived by each individual, and their message is quickly and faithfully embodied in the social conscience.'296 By the mid-1950s, television was increasingly popular with more people owning a television set than ever before. David Attenborough, who worked at the BBC as a producer at the time, suggested to his superiors that there should be regular natural history programmes 'about wildlife in the British countryside.'297 And so it was that Look was born.

Many of these early natural history programmes were presented by Sir Peter Scott, son of Captain Robert Scott of the Antarctic, who was a keen naturalist and ornithologist. 298 David Bellamy has called him the father of conservation; David Attenborough also describes him as 'conservation's "patron saint." Scott became involved with *Look* and other BBC productions (such as Birds in Britain and Nature Parliament). In the early days of this type of programming, it was Scott who 'convinced sceptical media magnates that nature and its conservation could draw and hold audiences comparable to almost any other programmes.'300 In 'Our Fragile Earth,' the third episode in the series Attenborough: 60 Years in the Wild, Attenborough described the influence Scott

²⁹⁶ Nicholson, *The New Environmental Age*, p. 80.

²⁹⁷ Attenborough, *Life on Air*, pp. 44, 46, 59-60, quote appears on p. 60.

²⁹⁸ See 'Sir Peter Markham Scott (1909-1989), painter, ornithologist and broadcaster', rev. by Paul Walken - http://www.oxforddnb.com/view/article/39842?docPos=3 - Oxford

Dictionary of National Biography, accessed electronically 27 August 2013.

²⁹⁹ See information on 'Sir Peter Scott' on the Wildfowl and Wetland Trust website – http://www.wwt.org.uk/about-us/history-of-wwt/our-founder-sir-peter-scott/ - accessed electronically 8 November 2013.

300 Nicholson, *The New Environmental Age*, p. 166.

had on him and on the post-war conservation movement/natural history programmes. Scott is, therefore, an important part of the development of an environmental consciousness after the war, and his influence on one of the great natural history presenters in Britain reflects Scott's standing and influence:

As a student, there was one person perhaps more than anyone else who fuelled my excitement about the natural world. He was the most celebrated broadcaster of his time, on radio; of course, there was no television [when he first started]. ... That man was Peter Scott. ... Peter Scott made me realise for the first time that there were species of animal around the world that were in danger of becoming extinct. It was a radical idea at the time.³⁰¹

Nature Parliament was a radio programme, part of 'Children's Hour,' which involved experts answering questions from children listening at home. 302 Scott was often a guest on the programme, and the participants did not merely engage in discussions but also were involved with a large number of questions and suggestions from children. 303 The very name of the programme also reflects ideas about nature conservation from the time – that humans should protect nature and debate how best to do it (in a Parliament-style system). This programme, and by extension the wider natural history programmes of the 1950s, continued a theme which the Council of Nature, the Nature Conservancy and the NSAS sought to take up – that of the education of young people. Audience participation at a young age with children interacting with the participants on these programmes meant that they were exposed to messages about wildlife protection and conservation directly. These were popular programmes which reached a huge number of children. With audience participation, this could further have increased the listening figures, as young people might have wanted to become involved with

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³⁰¹ David Attenborough speaking about Peter Scott, 'Our Fragile Earth', episode 3 of *Attenborough: 60 Years in the Wild*, 08:33-09:15 (2012).

As noted above, this slot was one which the Nature Conservancy provided speakers and information for – see The Nature Conservancy Annual Report, 1956, p. 53, FT6/6, TNA.

303 Memorandum about *Nature Parliament* from Head of Programme Contracts to Head of West Regional Programmes, RCONT1 – Talks – Peter Scott, File I 1936-1954, WAC.

it. 304 Whilst it is unclear where all the listeners came from and how old they were. the volume of information held by the BBC Written Archives, and the number of Nature Parliament and other natural history programmes, suggest that an environmental consciousness was developing within the target audiences of these programmes.

Building on the idea of animals in London Zoo, which had become somewhat of a theme of the early natural history programmes, Attenborough decided to develop new strategies for involving wild animals in programmes; instead of showing which animals could be found in zoos, he and a team were tasked with bringing back rare animals from their native habitats to the Zoo. The series would allow Attenborough to film some animals which had not previously been the subject of film-makers, such as driver ants and bats, and the programme became known as Zoo Quest. 305 When the first Zoo Quest episode was transmitted, it featured many different animals including snakes, lizards and different types of birds. Later episodes featured monkeys and other exotic wildlife. The first season in 1953 focussed on a trip to Sierra Leone to find the extremely rare Picathartes gymnocephalus bird (also known as the white-necked rockfowl). Over the course of six episodes, Attenborough and his team filmed a plethora of wildlife in their quest before eventually discovering their quarry, bringing it to the Zoo with viewers eagerly following their progress. In an event which reveals the success of the series, when Attenborough was driving through central London during the period the programme aired, whilst waiting at some traffic lights, a bus driver wound down his window and shouted across to Attenborough, asking

³⁰⁴ The Nature Conservancy's Annual Report of 1956 comments on the wide audience figures of programmes such as this - The Nature Conservancy Annual Report, 1956, p. 53, FT6/6, TNA. 305 Attenborough, *Life on Air*, pp. 33-35, 38-39.

whether they were ever going to find "that *Picafartees gymno-bloody-cephalus*." 306

Zoo Quest identified animals which were endangered and explained to viewers why they needed protection. The most popular quest was the search for the Komodo dragon in 1955. The equivalent to 50 per cent of the adult viewing public watched the episode. According to the Audience Research figures, viewers rated the programme no lower than a B grade (66% of reviewers gave the programme A+, and 33% an A grade). Whilst the Audience Research Reports from the programme only represent a section of the viewing public, they do provide evidence of whether viewers have generally enjoyed the programmes or not, and, as noted in Chapter 1, David Morley argues that the best way of understanding an audience's response to programmes is by having them write a report of them. Stuart Hall argues that television programmes are encoded and decoded at different stages – when first produced, they are encoded with a particular message and when broadcast, viewers decode the message and interpret it in their own ways.

The final Komodo dragon episode was described as an 'utterly breathtaking piece of television,' and whilst, perhaps, audiences did not directly connect the animals featured with ideas about nature conservation, subconsciously, links might

³⁰⁶ See 'Our Fragile Earth', episode 3 of *Attenborough: 60 Years in the Wild.* There is a clip of the programme here: http://www.bbc.co.uk/programmes/p011019k – accessed electronically 2 December 2013; *Zoo Quest* – Miscellaneous File, 1963-1964 T32/1,798/1, WAC; Programme scripts, *Zoo Quest* – Sierra Leone (*Zoo Quest* 1), 1953-1959, T6/444/1, WAC. Quote is taken from Attenborough, *Life on Air*, p. 46. More information on the bird can be found on the BirdLife International website:

http://www.birdlife.org/datazone/speciesfactsheet.php?id=6263 – accessed electronically 2 December 2013.

³⁰⁷ Audience Research Report for *Zoo Quest* –'Dragons for Komodo', *Zoo Quest* – Indonesia 1956, T6/439/1, WAC. The National Archives explains how the BBC compiled Audience Research Reports –

http://www.nationalarchives.gov.uk/nra/onlinelists/GB%200898%20R9.pdf – accessed electronically 25 July 2013.

Morley, 'Changing paradigms in audience studies', p. 24.

³⁰⁹ Hall, 'Encoding and Decoding', p. 11.

have been formed between the two. 310 When the World Wildlife Fund was launched in 1961, it was extremely popular and gained much support. Programmes like Zoo Quest revealed animals in their natural habitats and taught people about the problems which these habitats were experiencing. Therefore, using Hall's ideas about encoding/decoding, whilst the producers of Zoo Quest did not necessarily set out to make an overtly nature conservation programme, viewers might have interpreted it that way, especially when nature conservation ideas grew exponentially in the early 1960s (Chapter 3).

In addition to Nature Parliament and Zoo Quest, Look proved to be another extremely popular series. The very first episode was broadcast on 14 June 1955. It proved so successful that two years later the BBC established its Natural History Unit.311 It challenged prevalent ideas about nature, with each episode focussing a different topic. The voice over in the title sequence stated, 'It's time to look at a different world – outside the realm of human affairs – a world of grace and beauty - with its own kind of comedy - a world of danger and mystery - that challenges our understanding – at this world – the untamed life of nature. ³¹² Look was dedicated to the idea that the change that had occurred at the beginning of the twentieth century; that the move from shooting a bird or animal with a gun, to one with a camera, was a good thing. But it had a simpler objective than this. It sought to give people the chance of 'enjoying animals, of delighting in and wondering at their strange appearance or their strange behaviour, and of learning how to enjoy them more. '313 In an early episode of *Look*, Scott showed a film about woodpeckers, produced by the German director Heinz Sielmann. The film

³¹⁰ Audience Research Report for Zoo Quest - 'Dragons for Komodo', Zoo Quest -Indonesia 1956, T6/439/1, WAC.

Evans, A History of Nature Conservation in Britain, p. 99.

³¹² 'Look No. 3: "Land of the Flamingo", programme synopsis and running order', F.20, Papers of Sir Peter Scott, GB0012, CUL.

^{&#}x27;The Return of Look' by Peter Scott, 1959 or 1960, F.29, Papers of Sir Peter Scott, GB0012, CUL.

highlighted a part of the bird's life which no ornithologist had ever seen before; it revealed images inside woodpeckers' nests, shots of them feeding and also infrared footage of the birds in the dark. The film left a lasting impression in viewer's minds. The feedback from the programme took everyone by surprise. The producer, Desmond Hawkins, claimed that, apart from current affairs programmes, it was the first time that the switchboards at the BBC had been jammed by viewers' calling in. "They all wanted more films like it. We were amazed",' he noted. The most obvious explanation was that nature itself had now become 'a "current affair". Hawkins has even stated that that particular film "revolutionised" the series, but also, importantly, the wider role of television in inspiring and informing the public about the natural world. The most obvious application in the series is shown in the public about the natural world.

The significance of programmes like *Zoo Quest* and *Look* in increasing environmental awareness in audiences should not be underestimated. As Jonathan Burt notes, 'Animal imagery in film has a peculiar status in that ... audiences often respond differently to animals or animal-related practices than they do to other forms of imagery'; these practices generate an emotional response in viewers, and goes some way to explain why programmes like *Zoo Quest* and *Look* were perceived in the way they were. ³¹⁷ Natural history programmes are more than simply a programme about animals – the imagery of all kinds of creatures on screen offer audiences 'magnification' of the natural world, not only revealing some little known part of the animal kingdom but also

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^{314 &#}x27;Peter Scott: Woodpeckers' –

http://www.wildfilmhistory.org/film/272/Peter+Scott%3A+Woodpeckers.html – accessed electronically 8 November 2013.

Desmond Hawkins is quoted in Robert Lamb, *Promising the Earth* (London: Routledge, 1996), pp. 28-29.

³¹⁶ Hawkins is quoted by Gail Davies, *Networks of Nature: Stories of Natural History Film-Making from the BBC*, PhD Thesis, University College London (1998), p. 14.
³¹⁷ Jonathan Burt, *Animals on Film* (London: Reaktion Books, 2002), p. 10.

reflecting on the effects of this on the wider environment.³¹⁸ The 'woodpeckers' programme, for instance, generated a particular response from viewers partly because it made them aware of and showed footage of practices which had not been known about previously. As Gregg Mitman points out, it is important to recognise the transformative effect of natural history films.³¹⁹ We 'cannot underestimate the benefits science and environmentalism have accrued from the interest in wildlife and nature stimulated by film.'³²⁰ Indeed nature television programmes helped audiences view animals in their own environments, rather than in staged ones like zoos, and so audiences could better comprehend how everything was related.³²¹

This argument is supported by Max Nicholson, head of the Nature Conservancy between 1952-1966, who described *Look* in particular as placing conservation issues within the public's consciousness. This was not a comment by some unknown member of the public; as Nicholson was head of the Nature Conservancy for much of the decade, his statement can be taken with some credibility. Realising that the public were interested in these programmes, and that the Nature Conservancy's primary function was scientific research, and identifying the importance of education to the public, the Council for Nature (established with the assistance of the Nature Conservancy and of Nicholson) appeared in part to co-ordinate the environmental organisations which existed at the time, and in part to 'feed the media with ideas.' This demonstrates how successful *Look* became in educating and informing people, and how the Nature Conservancy and government recognised a need for that which they could not initially fill. *Look* was

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³¹⁸ *Ibid*, p. 93.

³¹⁹ *Ibid*, p. 165; See also Gregg Mitman, *Reel Nation: America's Romance with Wildlife on Film* (London: Harvard University Press, 1999), p. 206.

³²⁰ Mitman, *Reel Nation*, p. 207.

³²¹ *Ibid*, p. 91.

Transcript of interview between Max Nicholson and Elspeth Huxley, 3 October 1990, in M.2950, Papers of Sir Peter Scott, GB0012, CUL.

responsible for introducing animals to people in their own homes and, crucially, instructing people 'how to enjoy them.' Audiences would not necessarily have access to the animals featured and thus they learnt about them, thereby increasing the viewers' environmental consciousness. When BBC2 was launched in 1964, the BBC's Natural History Unit produced a magazine programme *Life in the Animal World* which included features on ecology, conservation and current issues relating to natural history. This reflects both a growing environmental consciousness and a desire to educate and inform the public as well as indicating how monumental and popular natural history programmes were in the 1950s. The Council for Nature, in the 1960s, became even more involved with education, as was *Look* (Chapter 3).

Between 1951 and 1954, the number of television sets that people owned in Britain doubled to three million, with the transmission signal reaching 90 per cent of the population by 1955. Television programmes such as *Zoo Quest* and *Look* brought environmental and conservation issues into people's homes. Whilst television was a relatively new medium, the fact these programmes dealt with these issues indicates that an environmental consciousness was developing. From watching them, people became more educated about the natural world, meaning they were more likely to put what they had seen into practice.

The appeal of such programmes possibly stems from the production style of them. 'Television seems to be describing the world as it is. This is most obvious in news and current affairs programmes,' and so, in the mid-1950s when nature

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³²³ Sheail, Nature Conservation in Britain, p. 126.

Attenborough, *Life on Air*, p. 218. See also Adam Jacques, 'How we met: David Attenborough & Desmond Morris', *The Independent*, Sunday 29 September 2013 – http://www.independent.co.uk/news/people/profiles/how-we-met-david-attenborough-desmond-morris-8842058.html – accessed electronically 29 October 2013.

325 Cain, *The BBC*, p. 64. Williams also discusses the growth of television in the 1950s and

³²⁵ Cain, *The BBC*, p. 64. Williams also discusses the growth of television in the 1950s and 1960s – see Williams, *Entertaining the Nation*, pp. 1, 7, 14. See also Nicholas Abercrombie, *Television and Society* (Cambridge: Polity Press, 1997), p. 148.

television programmes, such as the woodpecker programme, were deemed to be a current affair, this description should not be taken lightly. Current affairs programmes 'clearly make a claim to be telling the truth,' describing the world in reality, argues Nicholas Abercrombie. This claim is enhanced by the feeling that television is operating in the present, unlike any other medium.

In order for the audiences to understand them better, many nature conservation and wildlife programmes also have set narratives. Whether or not it is appropriate to place human analogies on animals – good, bad, kind, cruel and so on – has never seemed to bother audiences, states Derek Bousé. These analogies help the audience to make sense of things and view the world in a particular way. By doing so, the audience draws sympathy with animals and are therefore interested in them, engaged with them and concerned for them. This was evident in images of birds covered in oil during the *Torrey Canyon* oil spill in 1967 (Chapter 4), images which 'broke the heart of Britain. Whilst television does not convey to audiences reality in full, it does go some way towards realism – giving an impression of reality. As many viewers have little or no experience of the world or animals in which natural history films depict, they are good ways of understanding better the world around us. As Bousé considers, wildlife and nature conservation films play a part in influencing the public's 'perception and expectations of the natural world.

³²⁶ Abercrombie, *Television and Society*, p. 26. See also John Fiske, 'Moments of television: Neither the text nor the audience', in *Remote Control: Television, Audiences and Cultural Power*, edited by Seiter, Borchers, Kreutzner & Warth, p. 67.

³²⁷ Abercrombie, *Television and Society*, p. 26.

Derek Bousé, *Wildlife Films* (Philadelphia: University of Pennsylvania Press, 2000), pp. 127, 152, 161-162.

³²⁹ Richard Petrow, *The Black Tide*, p. 135.

³³⁰ Bousé, *Wildlife Films*, p. 7.

³³¹ *Ibid*, pp. 5-6.

In 1970, the BBC produced a new television series entitled *Doomwatch* which involved a fictional government department investigating unregulated environmental and scientific research (Chapter 5). Programmes depicting realistic stories, such as nature conservation serials or series like Doomwatch, offer a view of the real world, and as such there is a sense that there are no authors, 'The form conspires to convince us that we are not viewing something that has been constructed in a particular fashion by a determinate producer or producers. 332 Almost as a precursor to that, at least in the field of nature conservation, was the Nature Conservancy. Like *Doomwatch*, the Nature Conservancy investigated pollution in the environment, and sought to advise the government on bestpractice. Unlike *Doomwatch*, education was an important part of the Nature Conservancy's work. As Nicholson has noted, television was becoming a great influence on people's ideas. Yet nature television programmes feature rarely in studies of British environmentalism. Even those focusing on the 1970s seldom feature television programmes like Doomwatch or Doctor Who which were screened in that decade. As evidenced above, nature television programmes were screened regularly before the 1970s and these only grew in popularity during the 1960s, embedding the natural world in their viewers' consciousness. Whilst nature conservation issues associated with river pollution, dropping litter and access to the countryside, and the urban issue of air pollution did not coalesce with each other, through television programmes environmental issues could entrench themselves in the public's consciousness. The growth of television, by the end of the decade, signified another important milestone in the development of environmentalism in Britain.

³³² *Ibid*, p. 27.

Conclusion

An environmental consciousness existed in Britain after the Second World War through two distinct areas – nature conservation and air pollution. Both increased the public's concern about the fate of the environment, yet there was little correlation, in this period, between the two topics. The public would visit the countryside and witness pollution first hand through litter and through polluted rivers. They would watch television programmes devoted to nature conservation and join in practical conservation measures. Those in urban regions would also be made aware of environmental problems of air pollution. Whilst urbanites would visit the countryside, and see the pollution there as well as in the towns and cities they usually resided in, the organisations and pressure groups dedicated to combatting air pollution or promoting nature conservation did not coalesce at this time. Instead, they remained largely single issue organisations, concerned primarily with one topic or problem. These influences on the 1970s environmental movement therefore, cannot be viewed under the prism of broad networks which Christopher Rootes' uses to denote the movement. Instead they were part of a nascent environmental lobby, working toward an environmental benefit but with little interaction between the different bodies. Nevertheless, these groups laid the groundwork for later developments.

Chapter 1 discussed different ways to analyse such pressure groups – the resources which these groups use (resource mobilisation theory, RMT) and the political environment within which these groups operate (political process theory, PPT). The NSAS used its resources – its membership base and its expertise – to pressure the government into adopting clean air policies. It was known and respected by officials because it was a moderate, expert group. This is different to later, more radical groups such as Commitment, but the desire to be seen in a

positive light by authorities was not lost on Friends of the Earth, who refused to support Commitment's protest at the beginning of the 1970s because of the fear they would no longer be 'school friendly.'333

The NSAS also ensured that clean air remained an important political – and social – issue, through its film sponsorship and the activities of its members. The scope of the NSAS's campaign, evidenced through reports from their annual conference, also reveals the extent of the group's resources. They broadened the scope of their arguments, not only to describe the effects of air pollution on health or the damage to buildings but also on the natural environment. Whilst this pressure group already existed when the London smog disaster occurred, this did much to improve its reason for existing, working towards a common goal with the public in campaigning to reduce air pollution.

Similarly, the 'Keep Britain Tidy' group worked with its one million members and 30 affiliated organisations, to ensure that anti-litter practices were known to the general public and that they adhered to them, as well as pressuring the government into passing anti-litter legislation. Both the NSAS and 'Keep Britain Tidy' exploited the media successfully, sponsoring films, posters and other informational literature. Both also dealt with issues which resurfaced later in pressure groups which appear in Chapter 5, notably in SOC'EM and Commitment (air pollution) and Friends of the Earth (litter).

Chapter 1 also considered the position of individuals, who could be influenced from watching television programmes. The growth of television ownership during the 1950s meant that more people had access to the increasing nature conservation output on the BBC. This introduced conservation ideas to

³³³ Victor Anderson mentioned that Friends of the Earth wanted to keep their reputation intact so they could be used in schools – Interview with Victor Anderson, 3 May 2012.

audiences who might not otherwise be exposed to them. Whilst this thesis is largely concerned with the lead-up to the movement's appearance, and not the movement itself, there are still a number of important considerations made in this chapter which reflected later ideas. Although environmental ideas did not suddenly emerge in 1945 (as described in Chapter 1), the post-war period, described in this chapter, did lead people to think about the natural world in new ways. The destruction brought about by the war ushered in post-war sentiments about protecting nature, with the passing of the NC and the creation of National Parks. During the 1950s, air pollution was perceived to be a very real and significant threat to life; whilst London was long-known for its infamous 'pea-soupers,' never before had so many died as a result of this problem. The environmental awareness, generated through nature conservation television programmes, and responses to air pollution, placed the environment firmly in the minds of the public.

This was a period of environmental governance, influencing the later environmental movement. Nature conservation issues of various sorts continued to develop into the next decade, as evidenced in Chapter 3. Whilst air pollution did not suddenly dissipate in 1960, the passing of the Clean Air Act in 1956 was a landmark piece of legislation in environmental protection. The Clean Air Act signifies the closing of one chapter of environmental consciousness after the war, whilst laying the foundations for later action when pressure groups in the 1970s took up the mantle of air pollution, protesting at the pollution which came from the increasing numbers of motor vehicles on British roads. The clean air campaigns of the 1950s also reveal something of the nature of environmental concern in Britain. Environmental awareness, reflected in the case studies in this work, occurred through peaks and troughs throughout the period in question. Whilst nature conservation gradually embedded itself in people's psyche, the smog disaster in

London represented a momentary example of the destruction of the natural world. It gave the air pollution campaigners a cause to rally behind and initiated the popular clean air exhibitions across the country. Whilst the NSAS had existed for many years prior to 1952, it was only after the air pollution disaster in London, which revealed their concern was real, that it gained widespread support and they were able to lobby government successfully.

All this laid the foundation for the 1960s. As compelling evidence that the 1970s environmental movement was influenced by issues in the post-war period, University College London launched its first programme in ecology in 1960. This postgraduate diploma was funded by the Nature Conservancy. It was not long, John Sheail notes, before a new 'generation of ecologists' was born. 334 In the early 1960s (Chapter 3), the nature conservation movement expanded as natural history television grew in popularity and the Council of Nature pushed ahead with its education drives through the successful 'National Nature Weeks.' In addition the first international conservation pressure group of the post-war period, the World Wildlife Fund was established, with the remit to deal with conservation issues overseas. This was immediately popular and attracted many donations. Its success was a result of the consciousness developed in the 1940s and 1950s and its continued growth in the 1960s. In addition to this, the book Silent Spring appeared in 1962. This has been viewed as a seminal text in the development of the American environmental movement yet was received differently in Britain. This was partly because what it described was already known about, because of the consciousness developed and discussed in this chapter.

³³⁴ Sheail, Seventy-five years in Ecology, p. 191.

Chapter 3 – The Council for Nature, 'SOS Rhino,' 'the nun of nature,' and NERC: the evolution of conservation issues in Britain, 1960-c.1965

This chapter, which concentrates on the period 1960-1965, builds on the issues discussed in Chapter 2, and focuses on the theme of conservation. Some of the post-war influences of the movement were already in place, and now an environmental consciousness grew further in the public's psyche. The case studies in this chapter reflect this. Although Rootes' 'broad networks,' which constitute the environmental movement, were not complex enough here to designate the period as one when the environmental 'movement' existed, nevertheless this was a period of growing environmental concern, reflected in the Council for Nature's immensely popular 'National Nature Weeks' of 1963 and 1965, which informed and educated the public about conservation issues.

The case studies analysed below demonstrate a shift from the 1950s, a period of environmental governance, towards a greater public understanding of and awareness towards environmental issues. Chapter 2 focused on legislation, which was central to early environmental ideas after the war. By the early 1960s, concern within the general public for wildlife conservation (a problem which cannot be detached from other environmental issues) was such that the establishment of a pressure group to deal with this issue was a popular idea. Hundreds of thousands of people have bought best-selling books and millions have watched films and television programmes about the world's endangered wild life. Many of these have felt: "If only I could do something to help!" They no longer had to feel like that, when the World Wildlife Fund (WWF) was born, in 1961.

³³⁵ Arvill, *Man and Environment*, p. 141.

^{336 &#}x27;WWF in the 60's' - http://wwf.panda.org/who_we_are/history/sixties/ - accessed electronically 14 November 2013.

Owing to its role as the first post-war (international) conservation pressure group, WWF is a significant portion of this study. Part of the importance of this group was the role it played in educating young people about nature conservation issues. WWF was a new-style conservationist group (launched following an appeal in the popular newspaper the Daily Mirror), still moderate in its approach, but employing 'mass media to broadcast its message.'337 It reflected a period of greater environmental consciousness amongst the British public. The founders of the Fund wrote the so-called 'Morges Manifesto.' This was a mission statement of the pressure group and highlighted the important milestones discussed in this and the previous chapter. 338

At about the same time that the WWF was established, Silent Spring was making ripples across the Atlantic in the United States. In this chapter, it is analysed with regards to its message about conservation and how the government reacted to it. As this work is so revered in America with regards the birth of the movement, the different reaction to it here deserves some investigation.³³⁹ When Silent Spring was published in the United States, in Britain conservation issues had already started to move from 'localised battles for the welfare and well-being of ... [wildlife] into an arena of widespread environmental contamination. 340 Silent Spring influenced other works around the world by leading biologists and scientists.³⁴¹ Importantly, however, much of the responses were part of a wider

³³⁷ Rootes, 'Environmental NGOs and the Environmental Movement in England', p. 208. 'WWF in the 60's' - http://wwf.panda.org/who we are/history/sixties/ - accessed electronically 14 November 2013. The 'Morges Manifesto' can also be obtained from this webpage (and more specifically here http://assets.panda.org/downloads/morgesmanifesto.pdf).

The analysis of Silent Spring here is not meant to be a detailed study of the general public's reception to the book. This is difficult to do and would require a separate thesis dedicated to this issue. Instead, this chapter deals with Silent Spring largely from a government-perspective and how MPs viewed the book.

Connor Mark Jameson, Silent Spring Revisited (London: Bloomsbury, 2012), p. 21. See also Anon, 'Educating the Sorcerers' Apprentices', The Times, Monday 24 July 1961, p. 6; Anon, 'Concern Over Bird Deaths', *The Times*, Saturday 22 April 1961, p. 5.

341 Steyn & Wessels, 'Environmental Non-Governmental Contributions', pp. 99-100.

concern which existed before *Silent Spring*'s publication in Britain in February 1963. Rather, the book served as a prime example of some of the issues which were already being dealt with by the Nature Conservancy (NC). If anything, the book's publication simply heightened the awareness and gave politicians and others a focal point with which to discuss environmental issues.

By 1965 conservation was becoming an accepted and well-liked principle in society. Significantly, the chapter ends in that year with the NC, formerly independent, being absorbed into a new research council, the Natural Environmental Research Council (NERC). This act represents the ending of conservationism as a separate single-issue creed and a move towards the more inclusive environmentalism which emerged at the end of the 1960s. As noted in 1968 in *The Ark Under Way*, the Second Report of the World Wildlife Fund, 'The single most significant factor in conservation's current metamorphosis [to environmentalism] is the extent to which people everywhere are thinking in terms of interrelations among living things, and the conditions which affect them.'³⁴²

The Council for Nature & Nature Conservation in Britain 1960-1965

In the late 1950s, with the creation of the Council for Nature, with more people actively visiting the countryside and witnessing the destruction of it first hand, and with the growth of nature conservation television programmes, as well as those living in urban areas observing the effect of air pollution on the environment, conservationism had been slowly embedding itself in the public's consciousness. In June 1956, for instance, the International Nature Film Week was held in Edinburgh with 2,000 adults and 2,300 school children attending. Amongst the

³⁴² Stewart L. Udall, 'Hope for Earth's Fragile Wildlife', in *The Ark Under Way:* Second Report of the World Wildlife Fund, edited by Fritz Vollmar (Morges, Switzerland: WWF, 1968), p. 26.

films shown were those which depicted the effects of 'pollution in the destruction of plant and animal life' and films about African wildlife. 343 In 1961, the NC handed over evidence to the Pilkington Committee on Broadcasting. In it, they argued that broadcasting:

Is especially suited to the mass dissemination of information about ... conservation and can be used to educate all levels in the earth and life sciences and conservation. Without education only limited and inadequate advances in conservation are possible. ... Broadcasting ... can make a vital contribution towards the growing problem of the wise use of leisure and of mutual understanding between competing claimants for the use of our limited area of land and water.³⁴⁴

The Conservancy advocated a new channel to be made available on the BBC to further aid the dissemination of conservation to the British public.³⁴⁵ As seen in Chapter 2, nature television programmes were a growing style of broadcasting in the later 1950s and this continued to grow in the early 1960s, both in terms of popularity and content.³⁴⁶ By the end of the 1950s, television had overtaken radio as the main form of entertainment by the end of the decade. From the 1960s onwards, people in Britain spent more of their non-work waking hours watching television than on any other activity. Some evidence of the growth of television comes from television's share of all advertising expenditure, which rose from 6 per cent in 1957 to 22 per cent three years later in 1960. Moreover, by that year nearly all newspapers included television listings. 347

One of the main nature television programmes at the time was Look. It was often presented by Peter Scott, sitting behind a desk delivering information to

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³⁴³ The Nature Conservancy Annual Report, 1956, p. 51, FT6/6, TNA. The Nature Conservancy Annual Report, 1961, p. 61, FT6/11, TNA.

The Nature Conservancy Annual Report, 1962, pp. 95-96, FT6/12, TNA.

³⁴⁶ Nicholas Abercrombie notes that in the first few years of the 1960s, men in full-time employment spent an average of 121 minutes per average day watching television. compared with 23 minutes listening to the radio and 28 reading a book or newspaper. With women in full-time employed, the figures were slightly less, with 93 minutes spent watching television, 16 listening to the radio and 13 reading a book or newspaper – see Abercrombie, *Television and Society*, p. 148.

347 Williams, *Entertaining the Nation*, pp. 95-96.

viewers about the particular issue of the programme. Viewing the series as an important educational tool, the format and style which Scott adopted was endorsed by the BBC because of the role it played in educating people. 348 As some evidence of the programme's success in Britain, a Look book was even published at the end of the 1960s. 349 From studying the Annual Reports for the Conservancy between 1949 and 1970, it is clear how far this organisation valued education. These reports refer to various events in public places (libraries, social centres, museums and so on) and film screenings, photographic exhibitions, all to educate and inform the public about conservation. The Nature Conservancy recognised when it was failing in this and helped to establish the Council for Nature to deal with it. This organisation in particular was responsible for the National Nature Weeks which targeted the general public.

The purpose of *Look* was to 'make people aware that there is a great deal worth seeing and worth preserving in our disappearing countryside. Things which might easily slip into oblivion unless there are people who appreciate their value and recognise what is happening to them. Although this is not a radical statement which might have been made by environmental groups in the 1970s, it does nevertheless highlight an incipient environmental consciousness. It also touches on issues with which some groups in the 1970s were also concerned. SOC'EM worked for the 'betterment' of Newcastle and their mission statement and aims were not so different to this; it was just that, it included a lot more detail. 351 Whilst television ownership was increasing throughout the 1960s, and Look had an impact in that respect, the programme was able to project the nature

³⁴⁸ Davies, Networks of Nature, p. 106.

³⁴⁹ See *Look* – General Publication. Editorial, 1968-1969, R43/460/1, WAC. See also BBC Accounts and Annual Report, 1963-1964 (Cmnd. 2503), p. 51.

Look - General Publication. Editorial, 1968-1969, R43/460/1, WAC.

^{351 &#}x27;SOC'EM! Mission Statement', TWA.

conservation message to a far greater number of people than previously. The popularity of *Look* on the BBC led rival channel ITV to also venture into the natural history documentary business.

On 1 February 1961, *Survival* debuted on ITV. The first programme featured wildlife in London. This served a useful purpose – it showed people the wildlife on their own doorsteps, and, as many of the television viewing population resided in urban areas this was all the more important. The programme featured a range of wildlife in London, including wild flowers and wild pigeons which lived in bombed sites across the city, Arctic ducks and geese which wander about St James Park, and foxes. Later *Survival* programmes involved showing 'wildlife spectacles and charismatic mammals ... [in] places like the Serengeti' as well as *SOS: Rhino*. Survival sought to emphasise that conflict with wildlife was not the only problem; humans were often the real trouble. BBC's Natural History programmes were, and set out to produce their own. This further fed into the growing environmental consciousness which grew with creation of the WWF and the National Nature Weeks.

At the beginning of the decade, the Council for Nature were planning their own consciousness-raising event to be held in Britain – the National Nature Week of May, 1963. The Council worked closely with the BBC and produced a special *Look* episode to be aired during the week. This also happened to be the one hundredth episode of the programme, and was introduced by Prince Philip. The

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³⁵² Tom Walshe, Colin Bevan, Ruth Sealy & Naomi Phillipson, *A Knight on the Box: 40 Years of Anglia Television* (Norwich: Anglia Television Limited, 1999), pp. 82, 88. ³⁵³ 'The London Scene', 1961 – http://www.wildfilmhistory.org/film/84/84.html?filmid=84 –

³⁵³ 'The London Scene', 1961 – http://www.wildfilmhistory.org/film/84/84.html?filmid=84 – accessed electronically 8 November 2013.

³⁵⁴ Davies, *Networks of Nature*, p. 110.

Walshe et al, *A Knight on the Box*, p. 82.

³⁵⁶ Report of the Committee on Broadcasting, 1960, Volume II, Appendix E – memoranda submitted to the committee (Cmnd. 1819), p. 599.

purpose of Week was described in a voice-over at the beginning of the programme:

More people, bigger towns and cities, more food and power could mean that every useful inch of the surface of the earth will have to be cultivated or populated and every living thing or creature not directly useful to mankind will disappear. ... We go to all sorts of lengths to preserve cathedrals, castles, houses, pictures and all kinds of man-made works of art; surely we should at least do the same for works of nature.³⁵⁷

The first Nature Week 'aroused a cordial public response' and film screenings during the week were seen by 'thirteen thousand people'; this special episode of *Look* aired to 'an audience of millions.' This provides evidence of the impact that television programmes about the natural world, had on people. Whilst it is difficult to assess exactly what influence watching a programme had, the general impression is one of people becoming more informed about conservation issues and the plight of the natural world. As noted in Chapter 2, after an episode on woodpeckers aired in the 1950s, the BBC phone-lines were jammed by viewers calling in. They had telephoned to express their appreciation of the programme and request that more similar programmes were produced. The fact that *Look* reached 100 episodes, too, reveals the affection this programme had with the wider public. If it had not been popular, the series would not have reached anywhere near 100 episodes. Instead it surpassed this figure.

The Council for Nature also held a competition to get the public to design a logo for the 1963 week (and then to be adopted by the Council). The prize was 50 guineas. It was noted that designs which included particular plants, birds, animals or insects were not appropriate because 'the Council for Nature are concerned

358 BBC Accounts and Annual Report, 1963-1964 (Cmnd. 2503), p. 51; The Nature Conservancy Annual Report, 1963, p. 102, FT6/13, TNA.

³⁵⁷ Look Introduction, spoken by the Duke of Edinburgh, taken from Look – This is National Nature Week, F.40, Papers of Sir Peter Scott, GB0012, CUL.

with the whole of nature. '359 In this way, the Council further developed an environmental consciousness by getting people to think creatively about the environment and offering incentives. The Nature Week, which was so successful that a second one was held in 1965, reflected wider changes in society. In 1963, the Nature Conservancy noted that conservation is always in flux: in modern society, with rapid technological advancement, conservation ideas must adapt to a changing world. A 'new public awareness of the urgency of conservation tasks ... [is] now blending with a new nation-wide effort for scientific care of the human environment and its natural resources.'360 As will be seen in Chapter 4, by the later 1960s, concern about technological dominance and the perils of unregulated scientific research were a growing fear. This came to a head in 1970 with the influential television programme *Doomwatch*, the fictional department established to investigate these issues. It also links closely to Rachel Carson, who advocated caution about believing scientists without question and without studying the evidence. This is important to remember, especially when looking at responses to Silent Spring in Britain; responses in Parliament to the book when it was published were framed within a wider context of events at the time, and connected with the thalidomide scandal, amongst other things.

The World Wildlife Fund provided funding for the National Nature Weeks, as they coincided with the group's aim of making the public aware of the destruction of wildlife and wild places, 'and to the need for active conservation supported by informed public opinion.'³⁶¹ Commemorative stamps were produced by the Post Office in celebration of the week. 45,000 people visited the main event, which

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³⁵⁹ Anon, 'Emblem for National Nature Week', *The Times*, Friday 6 October 1961, p. 16.

The Nature Conservancy Annual Report, 1963, p. 1, FT6/13, TNA.

Reginald Bevins, House of Commons Debate, 'Special Stamp Issues', 18 December 1962, vol 669 cc155-6W –

http://hansard.millbanksystems.com/written_answers/1962/dec/18/special-stamp-issues#S5CV0669P0_19621218_CWA_35 – accessed electronically 13 April 2013; see also The Nature Conservancy Annual Report, 1963, p. 102, FT6/13, TNA.

consisted of a Wild Life Exhibition in London sponsored by *The Observer*. The exhibition included descriptions of 'threats to the countryside' from pollution, 'the misuse of toxic chemicals' and litter and was 'done on a shoe-string,' John Sheail notes, but 'the exhibits nevertheless helped to illustrate the scale of mankind's impact on the environment.' This point is significant – mankind's impact on the environment was beginning to feature more prominently in arguments about environmental destruction, ideas which were more indicative of 1970s environmentalism in Britain. It also included descriptions of the consciousness-raising issues discussed in Chapter 2, which developed in the 1950s.

A recording of birdsong by the BBC in support of this exhibition attracted much interest. The arrangement of tin cans and plastic to show how rubbish was produced and allowed to litter the countryside, fed into the concern about pollution of the ground and foreshadows Friends of the Earth's first campaigns against Cadbury Schweppes, where the group left bottles outside the company's buildings (Chapter 5). Nature trails were created and over 1,700 children from 81 schools walked a new nature trail in Norwich. The achievement of this event was to boost the morale of natural history and conservation bodies and highlight to the general public the dangers facing the nature world. More than 6,000 'pieces of publicity material' were distributed by the National Parks Commission during the National Nature Week in 1963 and displays also included representatives from various electricity boards, which attracted 'much attention.' The press gave a great deal

³⁶² Sheail, *Nature Conservation in Britain*, p. 129; see also The Nature Conservancy Annual Report, 1963, p. 102, FT6/13, TNA.

⁶³ Sheail, *Nature Conservation in Britain*, pp. 129-130.

The National Parks Commission, Fourteenth Annual Report, 1963, p. 27; Central Electricity Generating Board, Reports and Accounts, 1963, photograph between pages 52 and 53; Central Electricity Generating Board, Reports and Accounts, 1964, p. 66.

of publicity to the National Nature Week and it had 'a considerable impact on the general public.' 365

The National Nature Weeks were designed to inform the public about the need for conservation as well as show them the joy which could be got from studying wildlife. 366 *The Observer* sponsored exhibition for the 1965 National Nature Week received in excess of 100,000 visitors. As Lord Hurcomb noted in the House of Lords the following year, this shows how 'interest that has already been aroused in the countryside and the educational process which has gone on in recent years' was growing 'among all sections of our population. Whilst it is true that the environment, in the modern sense of the word, only entered popular political discourse from the 1970s, Hurcomb's comment is significant in that it identified that the British public were aware of conservation issues in this period. The National Nature Weeks were the precursors for the European Conservation Year in 1970 (Chapter 5).

During the 1965 National Nature Week, another special programme from *Look* was broadcast, again with Prince Philip's participation. The premise of the episode was 'Living with Nature' and it seemed to adopt a more urban feel, presenting the programme from outside locations in London. Building on the urban theme of Chapter 2 with air pollution, it also links to issues discussed in Chapter 5 with SOC'EM and Commitment (who campaigned on the issue of air pollution in cities primarily from motor vehicles). The episode even noted that whilst London's air was much cleaner than it was before the Clean Air Act, its air 'is still fairly

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³⁶⁵ The Nature Conservancy Annual Report, 1963, p. 103, FT6/13, TNA.

³⁶⁶ Object of Programme, from Skeleton of proposed BBC television *Look* programme for Nature Week, in F.40, Papers of Sir Peter Scott, GB0012, CUL.

Lord Hurcomb, House of Lords Debate, 'Problems of the Countryside', 18 May 1966, vol 274 cc1005-80 – http://hansard.millbanksystems.com/lords/1966/may/18/problems-of-the-countryside-1#S5LV0274P0_19660518_HOL_149 – accessed electronically 10 April 2013.

heavily polluted. He continued, 'The more man lives in urban conditions – the more important grass and trees and hills and rivers and lakes and flowers and birds and animals become to him. This was reflected in the 'Plant a Tree' campaign in 1973 when residents of urban areas were encouraged to plant a tree, to stem the advance of the "concrete jungle" (see Chapter 5). This episode was more focused on the urban environment than previous specials, and there seems to be a more ecological tone to it. The term 'ecological niche' was stated at one point, and the focus was on animals and plants that inhabit the towns and cities of Britain and how it was not necessary to talk about man versus nature, it could be man and nature. This again demonstrates the slow realisation and connection between urban and rural environmental issues, between pollution and conservation, which coalesced together later.

The National Nature Week in May 1963 directly engaged the public in environmental issues and 'showed how many different bodies and interests were making, combating, and studying human impacts' on the natural world. In part, due to the popularity of the Week, a series of three conferences were held, in 1963, 1965 and 1970, on the theme of 'The Countryside in 1970. The conferences dealt with issues of conservation, organisation and research. They stressed that two-way communication between citizens and planners was the best way to achieve a balance between conservation and development. The conferences were initially instigated because of the worries expressed by many of

³⁶⁸ Synopsis of *Look* – Living with Nature, a special programme of the *Look* series made for Nature Week, 1965, F.59, Papers of Sir Peter Scott, GB0012, CUL; See also Memo from Editor of BBC Natural History Unit, Bristol, Nicholas Crocker, to Head of West Regional Programmes, concerning the special 'Living with Nature' episode of *Look*, 18 February 1965, WE8/541/2 – West Region (Bristol) Sir Peter Scott, 1964-1967, WAC.

Synopsis of *Look* – Living with Nature, F.59, Papers of Sir Peter Scott, GB0012, CUL. ³⁷⁰ 'The Countryside in 1970', p. 7, C.889, Papers of Sir Peter Scott, GB0012, CUL.

³⁷¹ Sands, *Wildlife in Trust*, p. 49.

³⁷² Introduction of a publication, sent with answers to questions from Prince Philip, pp.1-2, received 29 July 2012.

the public about the pressures on the countryside and what would happen if 'action was not undertaken.'373 For Prince Philip, who was also involved with these conferences, conservation was not a way of turning back the clock but rather he saw it as the "total management" of rural areas' for the good of all the users of it. 374 The second conference was attended by 360 people; the third by 900 who came from as many as 330 different organisations. 375 Their success lay in their inspiration for the Countryside Act of 1968. This Act expanded the functions of the National Parks Commission (which had changed its name to the Countryside Commission). It encouraged local authorities and the government to educate citizens in countryside management.³⁷⁷ The Act conferred on local authorities the responsibility for 'the conservation and enhancement of natural beauty.'378

The conferences also helped to further develop environmental consciousness. As a result, by June 1970, 'the "environment" registered for the first time as an issue for voters at a general election.'379 The first conference 'confirmed that people of varied backgrounds and attitudes, involved in activities and courses which could alter the existing pattern of the countryside for the worse are ready to pause and think again before doing so. '380 The second conference in particular defined the pressures facing wildlife and the environment in

³⁷³ Arthur Skeffington, House of Commons Debate, 'European Conservation Year', 10 March 1969, vol 779 cc1127-38 -

http://hansard.millbanksystems.com/commons/1969/mar/10/european-conservation-year-1970#S5CV0779P0 19690310 HOC 553 - accessed electronically 10 April 2013.

Sheail, Nature Conservation in Britain, pp.147-148.

³⁷⁵ *Ibid*, pp. 148, 153.

^{376 &#}x27;Countryside Act' 1968, Chapter 41 –

http://www.legislation.gov.uk/ukpga/1968/41/introduction/enacted - accessed electronically 10 April 2013.

Lord Hurcomb, House of Lords Debate, 'Problems of the Countryside', 18 May 1966, vol 274 cc1005-80 - http://hansard.millbanksystems.com/lords/1966/may/18/problems-of-thecountryside-1#S5LV0274P0_19660518_HOL_151 – accessed electronically 10 April 2013. ³⁷⁸ See also Arthur Blenkinsop, House of Commons Debate, 'European Conservation Year',

¹⁰ March 1969, vol 779 cc1127-38 -

http://hansard.millbanksystems.com/commons/1969/mar/10/european-conservation-year-1970#S5CV0779P0_19690310_HOC_546 – accessed electronically 10 April 2013.

³⁷⁹ Sands, *Wildlife in Trust*, p. 69.

³⁸⁰ Max Nicholson, Draft of General Report 'The Countryside in 1970', Mark III, p. 2, C.888, Papers of Sir Peter Scott, GB0012, CUL.

contemporary Britain. The foreword of the report of that conference begins by describing the damage mankind has done to the environment and how humans are changing the natural world. 'Our countryside is undergoing sweeping changes which we do not yet understand and are still powerless to control. We must learn to understand them fully without delay, and to apply this understanding effectively to ensure that these changes, often ... useful in themselves, do not cause avoidable injury' to nature. ³⁸¹ Whilst the conferences were more geared towards organisations than individuals, if organisations did become more environmentally conscious, they would be able to cascade that down to their supporters. Besides which, the Nature Weeks had already aroused public interest in environmental issues. The purpose of the second conference was showing these groups how to be more environmentally aware and pressure those in authorities to act to save the planet.

The report of that conference described how conservation, was 'rapidly coming to be part of ... [the] everyday language' of the public, again revealing a growing environmental consciousness within the public. Study groups were established early in 1965 with specific topics to research, topics which were to be discussed at the conference. In relation to air pollution, it was noted that air pollution can drift 'from the towns and conurbations, and from other sources of heavy pollution, across the countryside. This placed air pollution in the rural as well as urban setting, compared with in the 1950s, when it was largely discussed in relation to the urban setting. The third conference, held during the European Conservation Year, was a celebration of the previous two and involved, schools,

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 ³⁸¹ 'The Countryside in 1970' Second Conference – A Review of the Preparatory Studies,
 10-12 November 1965, p. 4, C.889, Papers of Sir Peter Scott, GB0012, CUL.
 ³⁸² Ibid. p. 8.

³⁸³ 'The Countryside in 1970' Comment on Study Group No. 3 by the National Society for Clean Air, C.889, Papers of Sir Peter Scott, GB0012, CUL.

colleges, universities whilst the National Trust and Shell teamed up to introduce special Nature Trails. 384 To return to Stuart Hall's encoding/decoding analysis (discussed in Chapter 1), perhaps conservationism grew within the general populace in this period because people recognised the problems that were being described. For example, the episode of Look which aired during the second National Nature Week was dedicated to the urban environment. If a viewer lived in an urban area, they might be able to be more sympathetic towards, and better understand, the environmental issues portrayed, through watching that programme. As seen in responses to episodes of the science fiction television series Doomwatch in the early 1970s (Chapter 5), viewers connected fictional events portrayed in the series to real life problems.

World Wildlife Fund (WWF)

At the same time as the Council for Nature were engaged in consciousnessraising through their National Nature Weeks, the World Wildlife Fund was influencing young people through its 'Wildlife Youth Service.' Launched on 28 September 1961, WWF was the first international environmental group to emerge in the post-war period. At its inception, it had the 'encouragement and assistance of the Nature Conservancy' in Britain and 'aroused remarkably widespread public interest and help.'385 'There is little doubt,' Colin Willock claims, that an environmental consciousness in Britain would not have grown nor developed had there not been an emphasis 'on protecting the panda, the rhino, the whale, the elephant and many more species beleaguered in the wild." In a 'shock issue' of October 1961, the *Daily Mirror* warned that 'The giant tortoise of the Galapagos

³⁸⁴ Arthur Blenkinsop, House of Commons Debate, 'European Conservation Year', 10 March 1969, vol 779 cc1127-38 -

http://hansard.millbanksystems.com/commons/1969/mar/10/european-conservation-vear-1970#S5CV0779P0 19690310 HOC 546 – accessed electronically 10 April 2013.

The Nature Conservancy Annual Report, 1961, pp. 3, 68, FT6/11, TNA.

³⁸⁶ Willock, Wildfight: A History of Conservation, p. xii.

Islands, the Asian Bactrian camel, the Indian elephant, the North American whooping crane, and even the song birds and butterflies of Britain' were all doomed. Their only hope 'symbolised by the lovable giant panda' was us humans – through 'the WORLD WILDLIFE FUND.'387

The First Report of the WWF states that 'During the 1950s, it had been increasingly evident that the impact of human progress and development on the natural world had produced what amounted to a state of emergency for Wildlife.'388 Whilst Chapter 4 details the later 1960s, a period when environmental ideas began to become more inclusive and bio-centric, as nature conservation ideas had grown in the 1950s, by the start of the new decade, concern was beginning to be raised about mankind's role in the destruction of the natural world.

This 'state of emergency' was articulated to the public by Julian Huxley in three newspaper articles in *The Observer* in 1960.³⁸⁹ In these pieces he adroitly expressed the need for conservation, with the articles only increasing the sense of urgency people already felt to act. 390 Having returned from a trip to Africa, he realised that conservation was an issue which dwarfed all else. One of his articles vividly described how millions of animals had already vanished from Africa that century. He questioned whether the continent's wildlife now faced extinction in its entirety and identified local pressures including population and industrial growth. Concluding, he asked what could be done to save the wildlife both in Africa and

³⁸⁷ Anon, 'DOOMED – to disappear from the face of the earth due to Man's FOLLY, GREED, NEGLECT', *Daily Mirror*, 9 October 1961, p. 1.

388 'Section I – Report', in *The Launching of a New Ark*, p. 15.

³⁸⁹ See Julian Huxley, 'The treasure house of wild life', *The Observer*, 13 November 1960, p. 23; Huxley, 'Cropping the wild protein', The Observer, 20 November 1960, p. 23; Huxley, 'Wild life as a World Asset', The Observer, 27 November 1960, pp. 23, 25. See also The Nature Conservancy Annual Report, 1961, p. 68, FT6/11, TNA.

³⁹⁰ Anon, 'From the archive, 29 September 1961: World fund launched to save wildlife', originally published in *The Guardian*, 29 September 1961, taken from *The Guardian*, Thursday 29 September 2001 - http://www.guardian.co.uk/theguardian/2011/sep/29/wildlifewwf-launched-1961?INTCMP=ILCNETTXT3487 - accessed electronically 9 August 2012.

across the world. 391 These three articles not only highlighted the dangers faced to the biodiversity of Africa but they did far more. They used local examples to show how conservation could benefit both people and the environment and why citizens in Britain should help with conservation efforts at home and abroad. As Huxley was a creative soul, an intellectual and "ideas man," he produced a fluid, convincing argument which inspired and informed many readers. 392 When Huxley's articles appeared in *The Observer*, they 'hit home,' notifying readers of the importance of nature conservation. Like Rachel Carson (below) did when extracts from Silent Spring were published, Huxley received numerous letters from concerned members of the public.

The WWF was not merely a pressure group devoted to wildlife preservation; its scope was far greater. As the organisation's International President, Prince Bernhard of the Netherlands maintained, in the twentieth-century man had developed the power to destroy the world. Already humans were 'poisoning the air ... [and] poisoning the soil' and something had to be done. The organisation was not only concerned with protecting wildlife, but, crucially also sought to save the habitats within which this wildlife lived. It described itself as 'the new Noah's Ark ... built in a desperate bid to save the world's wildlife and wild places.'393 In the group's First Report, conservationist and WWF co-founder Peter Scott questioned why the issues the group dealt with mattered. 'Just as we have no right to allow radioactive fall-out to prejudice the health of unborn babies,' he ruminated, 'so we have no right to destroy the natural world with its flora and fauna which is the

³⁹¹ Julian Huxley's article is described in Kate Kellaway, 'How the *Observer* brought the WWF into being', The Observer, Sunday 7 November, 2010, p. 22 (from 'The New Review' section) -http://www.guardian.co.uk/environment/2010/nov/07/wwf-world-wildlife-fundhuxley – accessed electronically 9 August 2012.

Joe Cain described Huxley as an "ideas man" in *Ibid*.

³⁹³ A Message from the International President H.R.H. the Prince of the Netherlands, in *The* Launching of a New Ark, pp. 13-14.

rightful inheritance of the generations to come. 394 In this statement, Scott ties the Fund to Silent Spring (discussed below) which touched on the destruction of flora and fauna. Moreover, he also links to issues around nature conservation awareness of the early 1960s and those analysed in Chapter 2 with the Nature Conservancy and natural history television programmes. Those words reflect the reason why the WWF merits discussion here. It was not simply about saving the last few rhinos living in Africa, or some obscure species found only in a remote region of the earth; rather the pressure group was a milestone in the growth of environmental awareness, which sought to conserve the flora and fauna and recognised how all life is interconnected. In this way, the message of the group was similar to that of Rachel Carson in Silent Spring.

As Huxley's articles increased interest amongst the public, he and other conservation luminaries in Britain, including Scott and the director of the Nature Conservancy Max Nicholson, gathered to discuss what could be done. At the Conservancy, Nicholson told his staff that as the public was becoming increasingly conservation-aware, they should use that positively to raise money for conservation projects around the world. These select few met with Guy Mountfort, the head of a PR company, in May 1961, to consider all possible courses of action to save the world's wildlife. That Easter, Nicholson had written a document called, "How to Save the World's Wildlife," which was studied by those gathered. 395

His main argument was that, whilst they had proposed excellent environment protection schemes, the nature conservation organisations across the world lacked the financial capital to actually undertake them. Therefore he planned to establish an organisation which could financially assist conservation projects

³⁹⁴ 'Section IV – How Much Does It Matter? A discussion of the Issues involved', by Peter Scott in *The Launching of a New Ark*, p. 37.
³⁹⁵ Kellaway, 'How the *Observer* brought the WWF into being'.

across the globe, educate the public in proper conservation practices, and apply pressure to/lobby governments to develop strong conservation policies (in this respect, the WWF was acting like a traditional pressure group). The focus on wildlife was deliberate. In a letter to Ira N. Gabrielson, who was President of the Wildlife Management Institute in Washington (and later President of the US branch of the WWF), Nicholson claimed that "Animals and their welfare are probably just about the biggest money raining cause in the world." As the ideas began flowing about launching the Fund, between April and September 1961 more meetings were held to flesh out the details of the organisation.

When it was first launched, the group became the campaigning wing of the international conservation movement, with the International Union for the Conservation of Nature (IUCN) as the scientific wing. The IUCN wanted to 'awaken in the public an awareness that all humanity is endangered.'398 Initially partners, very quickly the Fund demanded more freedom and instead both organisations developed a looser relationship: WWF gave the IUCN some subsidiaries in exchange for scientific research from them.³⁹⁹ The Fund 'aroused remarkably widespread public interest' when it first appeared, striking a particular chord with the British public.⁴⁰⁰ Although the official papers of the WWF are based in Switzerland and have not been accessed as part of this project, the Papers of Sir Peter Scott, held in the University of Cambridge, have been consulted as Scott was a founding member of WWF; in addition Alexis Schwarzenbach's 2011 book Saving the World's Wildlife: The WWF's First Fifty Years which details the first

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³⁹⁷ Kellaway, 'How the *Observer* brought the WWF into being'.

³⁹⁹ Lamb, *Promising the Earth*, p. 30.

³⁹⁶ Nicholson is quoted in Alexis Schwarzenbach, *Saving the World's Wildlife: The WWF's First Fifty Years* (London: Profile Books, 2011), pp. 19-20, quote appears on p. 20.

Leaflet on the International Union for the Conservation of Nature and Natural Resources (IUCN), in C1445, Papers of Sir Peter Scott, GB0012, CUL.

⁴⁰⁰ The Nature Conservancy Annual Report, 1961, p. 3, FT6/11, TNA.

half-century of the Fund and the First Report of the World Wildlife Fund have also been used.

Whilst recording the achievements of this pressure group, Schwarzenbach also stresses how 'in Britain, the debate [about nature conservation] had started even before the publication of Carson's book [*Silent Spring*].'401 It was more a supplement to the arguments about agrochemicals and the natural world, rather than the first shot of a new movement, which is how it is often perceived in the United States.

Most of those who attended those early planning meetings between April and September 1961 were male; in fact, the only female was Phyllis Barclay-Smith. Barclay-Smith was an ornithologist, from 1946 the secretary of the International Council for Bird Protection, who received an MBE for services to conservation in 1958. 'Her great ability lay in organisation. She appeared to inaugurate endless meetings, conferences, and committees, and to publish reports. She founded the advisory committee on oil pollution of the sea ... and organised early awareness of the problem of toxic pesticides.' This links with *Silent Spring* (discussed below) but also with the responses to the *Torrey Canyon* oil spill of 1967, of which the greatest casualties were sea birds, thousands of which were covered in oil as a result of the spill. WWF even launched a special appeal during the spill. As pollution dominated the environmental movement of the 1970s, it is significant that the group had links with and discussed pollution here.

At these meetings, the 'name World Wildlife Fund was selected with the subsidiary title "An International Foundation for Saving the World's Wildlife and

401 Schwarzenbach, Saving the World's Wildlife, p. 13.

^{402 &#}x27;(Ida) Phyllis Barclay-Smith (1902-1980), *ornithological administrator*', by Colin J.O. Harrison – http://www.oxforddnb.com/view/article/61361 – *Oxford Dictionary of National Biography*, accessed electronically 26 October 2013. See also Schwarzenbach, *Saving the World's Wildlife*, p. 27.

Wild Places" which further reflects how the group sought to conserve not just wild animals but the whole of nature. 403 After it had been officially launched, the first task of this pressure group was to create a logo. The panda was selected, instantly recognisable even today as the Fund's logo. Nicholson described the criteria which these luminaries used for choosing this particular logo: 'We decided on three criteria ... it must be an attractive animal – one might say cuddly ... black and white, because of reproduction limits ... an endangered, or nearly endangered, species.'404 Scott designed the panda logo himself. David Attenborough has said of the logo, that the giant panda was at the time one of the most endangered and charismatic animals (it was also an image which allowed easy and cheap reproduction). 405 The panda was an animal which 'everyone feels affection' for. 406 It was an animal that had also been saved from extinction. Some of the early publicity surrounding the group commented on this – in the Daily *Mirror*'s 'shock issue' for instance, the 'hope' for the endangered animals is embodied in the panda, not only because it is the logo of WWF but because it 'was saved from extinction because Man acted in time.'407

In the first three years of existence, the Fund involved itself in action to save animals and plants from extinction. But it did more than this. Its work extended 'over the habitats of the animals, the wild places, the landscapes and the whole intricate relationship between water, soil, plants, animals and man himself.' It was dedicated to 'the concept that the conservation of nature is for the long-term benefit of humanity' and was 'concerned with educating people, especially the

⁴⁰³ 'Section II – A Brief History of the Formation of the World Wildlife Fund', in *The*

Launching of a New Ark p. 27.

404 Transcript of interview between Max Nicholson and Elspeth Huxley, 3 October 1990, in M.2950, Papers of Sir Peter Scott, GB0012, CUL.

⁴⁰⁵ David Attenborough speaking about Peter Scott, 'Our Fragile Earth', episode 3 of Attenborough: 60 Years in the Wild, 13:03-13:18 (2012).

406 Anon, 'World Fund Launched to Save Wildlife: Duke heads British appeal', *The*

Guardian, 29 September 1961, p. 3.

Anon. 'DOOMED – to disappear from the face of the earth', Daily Mirror, p. 1.

young, with influencing Governments, with altering fashions, with promoting legalisation ... [and] with initiating ecological and biological research. This is similar to how the NC described itself when it was first launched. The World Wildlife Fund was far more, then, than just concerned with protecting wild animals. Rather, it used ideas which Tansley first used in the 1930s and which Rachel Carson later developed in *Silent Spring* – that of eco-systems and how everything is connected.

The most important aspect of the Fund, at least in Britain, was its desire to educate people. Education was a crucial part of any conservation project which the group funded, with education activities 'designed to cultivate a new attitude to the natural world, while at the same time enlarging the horizons and enriching the lives of young and old alike. 409 In Britain one popular education scheme involved series of images designed by Scott depicting 'Wildlife in Danger,' distributed with Brooke Bond Tea and Coffee. Nine million sets (45 million cards) were issues with an album for these cards also on sale. Wallcharts were sent to 35,000 schools. Each card portrayed a particular endangered species and some information about the conservation of that animal. This proved to be a successful venture, creating a 'wide interest in and sympathy with the idea of saving the world's wildlife and wild places.'410 The group also recognised the importance of television, radio, newspapers, magazines and other media through which to publicise, pressure and educate. The First Report of the Fund, in a section on developing campaigning strategies, comments that a 'festival of wildlife films at an appropriate cinema not only attracts animal lovers, but a new audience of people who have hitherto been interested only in films. It focuses public attention on the problem ... Such a

⁴⁰⁸ 'Section I – Report', in *The Launching of a New Ark*, p. 17.

⁴⁰⁹ *Ibid*, p. 20.

⁴¹⁰ *Ibid*, p. 22.

festival was successfully held in London in 1962.⁴¹¹ During the National Nature Weeks in 1963 and 1965, similar film festivals were also held as had been the case during the clean air exhibition in Sheffield, where the films had been viewed by several thousand people. Churches were also used to inform the public, with preachers delivering sermons on environmental issues during special 'Wildlife Sunday's' held throughout the year. Wildlife subjects also tended 'to be near the top of the best-seller lists,' further reflecting a growing environmental consciousness. A wildlife calendar was also introduced with 75,000 copies distributed in 1963.412

Perhaps the greatest education drive by the group was towards young people. In Britain, a Wildlife Youth Service was initiated shortly after WWF had been formally established. Younger children joined the Panda Club whilst those aged between ages 11 to 18 became Wildlife Rangers. In just over a year of operation, the Service had 60,000 members, with members from eight different countries. This was not an insignificant number, and the Wildlife Youth Service aimed to be different to other youth groups. Rather than concentrating on character development and broadening horizons, the Service had 'a very concrete and simple objective – to save wildlife. 413

WWF funded not only international conservation projects but many at home in Britain, and provided money particularly for the wildlife affected by the *Torrey* Canyon disaster in 1967 (discussed in Chapter 4), as well as funding a 'travelling organiser to visit schools' and a 'travelling exhibition.' The fund preached that welfare consisted not only of the quantity of goods and services produced, but also

⁴¹¹ 'Section VI – Blueprint for setting up a National Appeal for the World Wildlife Fund', in The Launching of a New Ark, p. 52.

Ibid, pp. 53-54, quote appears on p. 53.

^{413 &#}x27;Section I – Report', in *The Launching of a New Ark*, p. 24.

^{414 &#}x27;Section IX - Projects Already Supported', in The Launching of a New Ark, p. 94; Anon, 'Projects include Tristan Voyage', The Times, Wednesday 29 November 1961, p. 17.

of the quality of the environment in which we consumed them.'415 In 1971, Labour spokesperson for the environment, Shadow Secretary of State Anthony Crosland criticised the group as being elitist. 416 In response, Scott argued that "the first money raised by the British national appeal, over £40,000, came from readers of the Daily Mirror in October 1961" when they read the 'shock issue." Whilst it is true that WWF was supported by royalty and other wealthy individuals, many supporters were ordinary people, with the group 'believing ... that this is a cause in which all people must be able to participate' and seeking small, as well as large donations. 418 By August 1962, the organisation in Britain had raised about £90,000.419

The 'shock issue' of the *Daily Mirror* that triggered so many donations, consisted of seven pages of reports about endangered wildlife, including the front and back pages. 420 The main story on the front page was surrounded by a chequered box with the words 'shock issue' on it. This was copied by the newspaper again in the early 1970s, when they began to feature 'Doomwatch' columns. These 'Doomwatch' columns dealt with any issues which were environmental; 'Doomwatch' issues were also 'shock' issues (Chapter 5). Placing a giant photograph of an adult rhinoceros and their baby prominently on the front page, played on the emotional attachment people have to animals. The paper called on people to support the WWF and prevent the phrase 'dead as a dodo' being replaced with 'dead as a rhino.' By using the newspaper to campaign in this

⁴¹⁵ Tony Aldous, 'Conservation bandwagon as a sign of success', *The Times*, Monday 11

January 1971, p. 4.

416 Anthony Crosland, 'A Social Democratic Britain', Fabian Tract 404, BP161511, LSE Library, p. 13 - http://lib-161.lse.ac.uk/archives/fabian tracts/404.pdf - accessed electronically 29 October 2012.

⁴¹⁷ Aldous, 'Conservation bandwagon as a sign of success', p. 4. ⁴¹⁸ 'Section I – Report', in *The Launching of a New Ark*, p. 24.

^{419 &#}x27;Correspondence', August 1962, C.1492, Papers of Sir Peter Scott, GB0012, CUL.

⁴²⁰ 'Section II – A Brief History of the Formation of the World Wildlife Fund', in *The* Launching of a New Ark, p. 30.

way, the World Wildlife Fund was educating the public about the destruction of the natural world. As the television series *Survival* aired their programme *SOS: Rhino* at about the same time as WWF was launched, and this programme proved extremely popular, the 'shock issue' had even more impact, using photographs of rhinos and the same terminology. 421 As mentioned in Chapter 2, during the 1960s the Daily Mirror became the most read newspaper in Britain and so it is significant that the 'shock issue' appeared from their stable and not that of another newspaper.422

In the WWF, Nicholson aimed to emulate one of Britain's most successful charities, the RSPCA (Royal Society for the Prevention of Cruelty to Animals). Whilst the WWF would raise money for all kinds of conservation ventures, it was the emotional attachment that people had in animals that appealed to him. Indeed the term 'wildlife' was a relatively new term to describe the flora and fauna of an area. 423 This emotional attachment was seen again in 1967 when, during 'Operation Mop Up,' the response to the *Torrey Canyon* oil spill, many people became particularly concerned about the plight of oil soaked birds (Chapter 4).

Significantly, the WWF gave ordinary people the chance to fund conservation projects around the world. It made them feel part of something special, that they were doing their bit to save the world. They were becoming globally as well as environmentally conscious. The group informed the general public about what was going on worldwide and, importantly, by doing this it emphasised the inter-connectivity of all living things and why it was important to

⁴²¹ For more information on SOS: Rhino see the 'Wild Film History' website – http://www.wildfilmhistory.org/film/86/S.O.S.+Rhino.html - accessed electronically 8 November 2013.

Evans, A History of Nature Conservation in Britain, pp.126-127; see also Horrie, Tabloid Nation, p. 247 (specifically mentions the Daily Mirror's readership peaking at 5.25 million in 1967); 'WWF in the '60's' - http://wwf.panda.org/who we are/history/sixties/ - accessed electronically 14 November 2013.

423 Schwarzenbach, *Saving the World's Wildlife*, pp. 20, 28.

save an animal that lives hundreds or thousands miles away. It supported ideas about ecosystems which were developing at the time. This was further enhanced by the Council for Nature's National Nature Weeks as well as by Rachel Carson in *Silent Spring*.

The Fund's first publication was a pamphlet titled *Save the World's Wildlife*, with the question posing to a general audience how they could save the wildlife of the world. The photographs within the document contained pictures of animals from across the world: an elephant suffering in a drought in Africa, an oil covered bird, an African rhino which had been killed because of the belief it provided medicinal benefits in Asia, as well as pictures of dead birds in Britain, their death blamed on the use of toxic chemicals in agriculture. Oil covered birds – guillemots, sea birds – were to be later victims in a more extreme case of oil pollution with the *Torrey Canyon* disaster in 1967 (Chapter 4). This might explain why that disaster had a big impact on the development of an environmental consciousness. Pictures in newspapers and especially on television during the oil spill horrified the viewing public, particularly children. The inclusion of pictures of the dead birds in Britain in the pamphlet also helps explain why *Silent Spring* did not have the same impact here as it did in the United States. About the guillemot the pamphlet said:

This guillemot is patiently waiting for death. It is covered with thick oil which has been discharged on the sea by a ship. It cannot swim or fly and has swallowed a large amount of oil. Oil-pollution is a world-wide problem and through the efforts of the International Council for Bird Preservation (C.I.P.O.) the governments of the leading maritime countries have agreed to co-operate in taking steps to keep the seas clean. However, much must be done before this cruel and wanton destruction of sea birds is ended.⁴²⁴

⁴²⁴ Taken from *Save the World's Wildlife*, September 1961, p. 7. Schwarzenbach has photographs of some sections of this pamphlet in his book, *Saving the World's Wildlife*, pp. 47-49 (p. 47 has a photograph of the front cover of *Save the World's Wildlife*).

In that commentary, there are also echoes of Guilty Chimneys (Chapter 2), where the narrator claimed that people were being murdered by air pollution. People were helpless, like the birds were, against the pollution. More explicitly, the words of the film 'We haven't caught the culprit, though we know him well. Between us, we created him' reflect sentiments here about the birds covered in oil. Similarly, Guilty Chimneys states 'For this patient we'll call it – heart failure, or acute bronchitis. What we know guite well is if it weren't for the smoke laden fog outside. he would be on his feet at this moment,' which is not so different to the commentary about the guillemot 'patiently waiting for death.' In both cases, the perpetrator was the same – pollution caused by humans.

In 1967, the *Torrey Canyon* was to become the first environmental disaster at sea in the post-war period, but before that, as this WWF pamphlet shows, concern did exist about oil discharged from ships at sea when they clean their tanks (this is discussed more in Chapter 4). This was at nowhere near the levels that were discharged from the Torrey Canyon wreck, but it does show how WWF was concerned with many different issues. Foreshadowing Silent Spring, the pamphlet also described bird deaths:

A heap of corpses found during one day on a British farm. In many parts of the world this is a familiar daily sight. In the attempt to control harmful insects and other pests by poisonous chemicals thousands of birds, which in fact help to control pests, die a slow death. Many of the victims are song-birds. Reports from field observers are distressing - many dying birds fall out of trees, out of the sky or flutter helplessly on the ground. Animals which eat the dead birds – even domestic pets, dogs, cats and kittens have died in evident suffering. Toxic chemicals not only kill the native birds of a particular country but also birds passing through on migration. Farming must advance, but not on heaps of corpses. Short-sighted and selfish practices must be vigilantly studied and vigorously restrained. 425

⁴²⁵ *Ibid*.

It explicitly connected to Silent Spring in the comment about song-birds, which is where Carson came up with her title (when the birds die, the spring is silent). It was also indicative of the *Doctor Who* story 'Planet of Giants' from 1964, which was itself based loosely on Silent Spring. As noted below, in that story, many creatures - useful creatures, such as bees and worms - die because a new insecticide has been invented which was everlasting and kills 'indiscriminately' and the cat's death in 'Planet of Giants' echoes the mention of cats in the quote.

The final pages of the pamphlet consisted of a 'World Wildlife Charter' which was 'an environmentalist code of ethics' created by Nicholson and signed by 22 environmentalists. This charter spelt out clearly the need for conservation. 'The signatories "solemnly" pledged, among other things, "to make sure that room shall be left for wildlife," "to protect all wildlife from unintentional or wanton cruelty" and "to encourage children to develop a love and understanding of wildlife." 426

The Fund used 'the knowledge that wildlife and wild places are increasingly threatened all over the globe,' to utilise the media to raise funds for conservation projects. 427 On the day it was launched, the Save the World's Wildlife pamphlet was distributed, along with reprints of Huxley's articles in *The Observer*, to all major newspapers. At the launch the film SOS Rhino was shown – this highlighted some of the issues which WWF sought to remedy. SOS Rhino was shown to the public as part of the ITV television series Survival. This programme was television's 'first big international conservation story.'428 The launch was hugely successful; thanks to the television and newspaper coverage, money began pouring in. 429

⁴²⁶ Schwarzenbach, Saving the World's Wildlife, p. 50.

⁴²⁷ Press release, 9 September 1966, M.1178, Papers of Sir Peter Scott, GB0012, CUL.
428 Walshe et al, *A Knight on the Box*, p. 88.

⁴²⁹ Schwarzenbach, Saving the World's Wildlife, pp. 50-51.

One reason why WWF was successful was because those in charge quickly developed the group's individual sense of identity. It was a public interest group with an international focus. 'While their global ambitions, laid down in the deed of foundation, set them apart from national and regional competitors, it was their commitment to the ideals of the business world which differentiated WWF from other international conservation organisations.'430 Many of the campaigns in Britain were media-driven, revealing how far things had advanced in society with regards to the status of the media. The projects which WWF supported varied from location to location – from long-term ecological research to providing grants to local conservation groups, as well as putting money into educating citizens about nature conservation. Crucially, in addition to fund-raising, and providing finance for conservation projects, the group 'also began to influence government decisions in favour of the environment' – that is, they functioned like a traditional pressure group. 431 In their Second Report, the group spoke of their 'growing influence' with governments and authorities. 432 By 1965, after four years of operation, WWF had put £675,000 towards conservation projects, with between £160-200,000 being raised in Britain alone. Britain led the world in the campaign to protect wildlife. 433 In ten years, WWF was one of the best known environmental groups in Britain. 434

WWF achieved so much in its early years partly because of programmes such as *Look* which introduced the concept of conservation directly into people's homes (which was something that *Doomwatch* did later – see Chapter 5), making WWF particularly attractive. With the presenter of *Look*, Peter Scott a regular attender at WWF meetings, and in 1973 becoming the first person to get a

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⁴³⁰ *Ibid*, p. 81.

⁴³¹ *Ibid*, pp. 90, 95, 98.

⁴³² Vollmar (ed.), *The Ark Under Way*, p. 237.

Anon, 'Britain leads the crusade to preserve wild life', *The Guardian*, 28 September 1965, p. 6.

⁴³⁴ Schwarzenbach, *Saving the World's Wildlife*, p. 101.

Lamb, Promising the Earth, p. 29.

knighthood for conservation services, it gave the organisation a new appeal to ordinary people. Through his work on *Look* and other programmes like *Nature* Parliament he was a household name. 436

As a promotional pressure group, WWF sought to educate the public in nature conservation issues. Their education drives involved lectures, films and exhibitions, with members being actively encouraged to lobby their political representatives and to correspond with newspapers and other media outlets to criticise or praise their environmental coverage. 437 They were successful, partly because they exploited the media (one of the points which Kimber and Richardson claim help groups succeed – see Chapter 1), but also because of television programmes such as Look and Zoo Quest from the 1950s making people aware of environmental problems. People were inspired to donate to the group because of what they had witnessed on television. In addition, the growing consciousness through the Council for Nature's National Nature Weeks further increased the group's support.

As a result of the establishment of the Fund, interest in environmental issues grew, according to the Nature Conservancy. 438 The Fund increased the public's awareness of environmental problems and threats to wildlife, such as through their images distributed with Brooke Bond tea. It provided a way they could become involved with nature conservation. It also played a role in informing world leaders about endangered animals and conservation issues. 439 WWF, it was hoped, would increase exponentially the already rising public interest in conservation issues. 440

⁴³⁶ Schwarzenbach, *Saving the World's Wildlife*, p. 35.

⁴³⁷ Copy of lecture given by Peter Scott 'The Message Must Go On', n.d. likely to be late 1960s/early 1970s, p. 2, in G.36, Papers of Sir Peter Scott, GB0012, CUL.

⁴³⁸ The Nature Conservancy Annual Report, 1962, p. 3, FT6/12, TNA.
439 Summary of speeches by Peter Scott at Stockholm, 30 October 1971 'Why, When & Where?', p. 2, G.36, Papers of Sir Peter Scott, GB0012, CUL.

⁴⁴⁰ The Nature Conservancy Annual Report, 1962, p. 3, FT6/12, TNA.

With the emergence of WWF, there was gradual movement towards the realisation that the important issues were not just local but global, and that protection of wildlife meant protection of the earth as a whole.⁴⁴¹ It was successful in achieving its aims of raising money in Britain, in part because of the exploitation of media resources.

Appearing in the early 1960s, WWF was also able to build on the growing concerned public, which was further propagated with events such as the National Nature Weeks and which in turn fed off the fame of WWF. Whilst WWF represents a pressure group similar to the National Smoke Abatement Society, rather than those which emerged in the 1970s, its significance lies in its role in educating the public and pressuring governments.

Lord Shackleton described the changing world and the importance of WWF [note, that the word 'wildlife' in the early days was often spelt as two words 'wild life'; either is valid today]:

Most of my remarks will be directed to the concern felt among those who are interested in wild life, and what is striking is the great increase of interest on the part of the public in the wild life around us. An example of this is the extraordinary success of a body such as the Wild Life Fund. We realise that, as man's civilisation advances, or appears to advance, there are certain aspects of natural life which it is extremely important to retain and to preserve. It is a fact that for many years now naturalists have been expressing grave concern about the use of chemical insecticides in farming and in other ways. As long ago as 1950 there was a long and powerful plea from a world conference in Sweden for caution in this field.⁴⁴²

This exhibits the magnitude of the foundation of the World Wildlife Fund, in addition to highlighting the changing view British society was beginning to adopt

Lord Shackleton, House of Lords Debate, 'Dangers from Toxic Chemicals', 20 March 1963, volume 247, cc118-220 –

⁴⁴¹ Kellaway, 'How the *Observer* brought the WWF into being'. See also: Information from 'WWF in the 60's' – http://wwf.panda.org/who_we_are/history/sixties/ – accessed electronically 14 November 2013.

http://hansard.millbanksystems.com/lords/1963/mar/20/dangers-from-toxic-chemicals – accessed electronically 6 August 2012.

with regards to environmental protection. It is important to consider here because it was the first international conservation group of the post-war period. WWF is still in existence today, and is better known than some of the pressure groups discussed in this thesis. In its early days it built on the nature conservation issues which emerged after the war, but its success in Britain was largely affected by the earlier establishment of the Council for Nature in 1958. Like many of the responses to environmental problems before the late 1960s, WWF was a reactive pressure group, launching in response to a specific issue (and although it broadened its scope later, it was initially three articles in *The Observer* that were the stimulus for its creation); in that sense, it reflected the pressure groups of the period, forming part of the environmental lobby. It did not form sufficiently complex broad networks to be considered part of the environmental movement at the time, yet was still an important group in the development of an environmental consciousness, raising environmental awareness amongst the British public. Through their lobbying and education schemes, WWF inspired many people to donate money to save the world's wildlife.

It was noted in Chapter 1 that this project is not interested particularly in the function of pressure groups, more that they exist at all, and their existence being evidence of environmental awareness. Nevertheless, in analysing WWF, bearing in mind the resource mobilisation and political process theories described in that chapter, it is clear that their membership was essential for its success. The group's founders being well-known probably helped, but as this was largely a fundraising organisation, its members were crucial for it to succeed. The wider context within which groups emerge is also important to consider. There was no one event which precipitated the group's rise in membership in the way the smog disaster did with the NSAS. But the issues discussed in Chapter 2 – which led to a growing

environmental consciousness – made conditions more favourable for WWF to emerge within. It is debatable whether Huxley's newspaper articles would have had the same impact had they been written earlier or later, but WWF did emerge in reaction to them and if the group had appeared earlier then a consciousness might not have been such that conditions would have been more favourable. Conversely, later, other issues such as the *Torrey Canyon* could have overshadowed them. As a pressure group raising awareness of environmental issues, however, it seems that the wider environment was favourable for WWF to appear within.

Silent Spring

Personalities such as Peter Scott and Max Nicholson were key figures in British conservationism at this time, and were co-founders of the World Wildlife Fund, as well as being household names. However, a single person dominated the environment in the United States in the early 1960s. That person – Rachel Carson – wrote the seminal work *Silent Spring*, published in 1962. This book has been viewed with almost biblical reverence in the United States regarding the birth of the environmental movement. In 1963 Carson testified before both Houses of Congress; one senator, Abraham Ribicoff, on her arrival into the Senate, told her that she was 'the lady who started all this.' The reaction was distinct in Britain and is why analysis of the book is included within this thesis. Whilst the argument is often made in the United States that *Silent Spring* was the book that launched the modern environmental movement, and it was the '*Uncle Tom's Cabin* of environmentalism,' the book's impact in Britain was different. It is therefore worth

See Rachel Carson Prize – http://www.rachelcarsonprisen.no/eng/Biography/Who-was-Rachel-Carson – accessed electronically 6 November 2013; Al Gore also mentions this in the Introduction of the 25th edition of *Silent Spring* – http://classwebs.spea.indiana.edu/bakerr/v600/algore.htm – accessed electronically 8 November 2013. It is also mentioned in Linda Lear, *Rachel Carson: Witness to Nature* (London: Macmillan, 1997), p. 3.

considering why that was.⁴⁴⁴ Relatively little exists in the historiography pertaining to the book's reception in Britain, and so its inclusion here provides an original contribution to knowledge, analysing the book in a British context.⁴⁴⁵ Those scholars who do refer to it seem to assume that because it was so successful in America, it was the same here.⁴⁴⁶

That is not to say it did not have any impact; an early story on the popular BBC television series *Doctor Who* was inspired by the book. And there were some furious debates in Parliament concerning Carson and her work. However when compared to the response in the United States (that the book ushered in the modern environmental movement), it is clear that the reception here was more muted. Part of the reason for the different response by the government, in Britain, was geographical: Britain had less acreage of agricultural land than the United States and so generally used fewer pesticides. The main reason that the British government did not view the information in *Silent Spring* with any urgency was that, when it was first published here in February 1963, much of what Carson wrote about was already known, and measures were in place to deal with these issues. This is further evidence, therefore, of environmental awareness at this

⁴⁴⁴ Stephen Fox has used the *Uncle Tom's Cabin* analogy to describe *Silent Spring*. Guha mentions this in his work, *Environmentalism: A Global History*, p. 69. See also Ralph H. Lutts, 'Chemical Fallout: Rachel Carson's *Silent Spring*, Radioactive Fallout, and the Environmental Movement', *Environmental Review*, 9:3 (1985), p. 211; Rachel Carson, *Silent Spring* (Boston: Houghton Mifflin, 1962).

There is little in the historiography because environmental history is in its infancy in Britain and so there are not the numbers of scholars here to write about it, when compared to the US. Also there is a tendency to perceive the American response as the same everywhere, with several scholars – like Veldman, Rootes, Dominic Sandbrook and so on – mentioning it only in passing and describing it in terms of the response in America and not elsewhere. That is, they view the response as the same universally, whilst this is not the case. There is also relatively little written on the books response elsewhere in Europe and almost nothing in other parts of the world, like Asia.

Those scholars who do discuss it in this way include Guha, *Environmentalism: A Global History*, pp. 3, 69-73; Peterson del Mar, *Environmentalism*, pp. 102-103. See also Jameson, *Silent Spring Revisited*.

time.⁴⁴⁷ The work is included here as evidence of this awareness existing before the book was published.

Silent Spring was 'a social study, eloquent, sincere – and alarming.'448 One author even states that 'To read its early passages is like listening to God call the world into being during the days of its creation, even if this is only the world of environmental ideas.'449 Numerous scholars echo this opinion, stressing the importance of Carson's work on modern environmentalism.'450 Carson herself is sometimes known as the 'nun of nature.'451 Silent Spring was a book of popular and partisan science, using many examples and presented neatly for public consumption. Beyond the facts, however, a deeper argument was present, that nature was to be respected. The book's leading idea was about ecosystems – everything was connected, including man and nature. It was instantly successful, becoming a best-seller that was translated into twelve languages. In 1999 it reached fifth place in Random House's modern library list of the top 100 twentieth-century non-fiction, seventy-eighth in National Review's list of 'The 100 best non-fiction books of the century' and in 2006 sixteenth in Discover Magazine's '25 Greatest Science Books of All Time.'452 In Germany the translated version was a

⁴⁴⁷ This is mentioned by Schwarzenbach, *Saving the World's Wildlife*, p. 13.

Anon, 'When the Sedge Withers and No Birds Sing', *The Times*, 14 February 1963, p.

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449</sup> Rebecca Solnit, 'Three Who Made a Revolution', *The Nation*, 16 March 2003 – http://www.thenation.com/article/three-who-made-revolution#axzz2c2vbR2EG – accessed electronically 15 August 2013.

⁴⁵⁰ See Adam Rome, Adam Rome, "Give Earth a Chance": The Environmental Movement and the Sixties', *Journal of American History*, 90:4 (2003), pp. 525-554; Guha, *Environmentalism*, pp. 69-73.

⁴⁵¹ Eliza Griswold comments on Carson as being a 'nun of nature' in her article: 'How "Silent Spring" Ignited the Environmental Movement', *The New York Times*, 21 September 2013 – http://www.nytimes.com/2012/09/23/magazine/how-silent-spring-ignited-the-environmental-movement.html?pagewanted=all – accessed electronically 15 August 2013.

⁴⁵² Random House's modern library list of the top 100 twentieth-century non-fiction -

http://www.randomhouse.com/modernlibrary/100bestnonfiction.html; National Review's list of 'The 100 best non-fiction books of the century' – http://www.listsofbests.com/list/10362-national-review-s-100-best-non-fiction-books-of-the-20th-century?page=2 (see also) http://old.nationalreview.com/100best/100_books.html; Discover Magazine's '25 Greatest Science Books of All Time' – http://discovermagazine.com/2006/dec/25-greatest-science-books/ – all accessed electronically 23 July, 2012.

best-seller for many months, and there was a sharp increase in membership of conservation organisations. In Sweden it ushered in modern environmentalism. 453 Supporters included both President John F. Kennedy and Prince Philip. 454

Much has been written about Carson herself and the book's reception in the United States. An abundance of literature was also published in September 2012 in honour of the book's fiftieth birthday. Relatively few scholars in Britain, however, have discussed Silent Spring in any detail. Silent Spring has not been a popular topic for discussion by historians of modern Britain. 455 Part of the importance of examining Silent Spring here, therefore, is to mitigate this absence from the narrative of the development of the 1970s environmental movement. As Max Nicholson has argued, 'Even after Silent Spring, effective action in North America followed feebly and at a snail's pace, while in Britain it had already been set in hand before Ms Carson's book was published.'456 The first encounter between conservationists in Britain and toxic chemicals was as early as 1952, when the Nature Conservancy told Parliament that the use of chemical sprays on roadside vegetation was having a detrimental effect on wildlife. 457 That same year, the Conservancy released a film *The Making of the Soil* which advocated the importance of soil preservation and discussed the role of chemicals in agriculture. The film highlighted 'The effect of agricultural methods and farming on the chemical cycle of natural plant life.'458 1960 brought reports of deaths, not just of

⁴⁵³ Guha, *Environmentalism*, pp. 71-73.

⁴⁵⁴ *Ibid*, p. 72; see also Lutts, 'Chemical Fallout', p. 211.

⁴⁵⁵ It is discussed briefly by Sheail, *An Environmental History of Twentieth-Century Britain*, pp. 235-236; Sheail, *Pesticides & Nature Conservation*.

⁴⁵⁶ Nicholson, *The New Environmental Age*, p. 46.

^{//} Ibid, pp. 46-47. J. Morrison, MP for Salisbury, questioned the Minister of Agriculture in November 1952 about toxic sprays and its effects on wildlife – see also J. Morrison, House of Commons Debate, 'Toxic sprays (Research), 20 November 1952, vol 507 c187W – http://hansard.millbanksystems.com/written_answers/1952/nov/20/toxic-sprays-research#S5CV0507P0 19521120 CWA 52 – accessed electronically 27 November 2013. 458 'The Making of the Soil', 1952 – https://www.bfi.org.uk/inview/title/6387 – accessed

electronically 5 November 2013.

birds, such as woodpigeons and pheasants but also of foxes. The image 'of half-blind foxes eating grass, touched a tender nerve in the countryside.' As the National Parks Commission Annual Report for 1960 commented, 'The growing public concern about the effects of the use of toxic chemicals on wild life was reflected in the considerable publicity given last spring to the mysterious deaths of large numbers of bird, allegedly due to the use of toxic sprays.' Hence Monks Wood Experimentation Station was established in Cambridgeshire that year, and it was there that the 'Toxic Chemicals and Wildlife Division' of the Nature Conservancy was formed to investigate these deaths. In preparations for the Stockholm Conference of 1972 (Chapter 5), in a report by the Conservancy, it was noted that as the 1950s progressed, 'there was growing concern [in Britain] that the increasing use, especially as seed dressings, of new and highly toxic organochlorine insecticides (dieldrin, aldrin, heptachlor) was causing widespread and catastrophic deaths of wild birds.' This was all before *Silent Spring* was published.

What the book achieved

Silent Spring offered a critical assessment of the indiscriminate use of pesticides and increased public awareness in the United States of the dangerous effects of chemicals on the natural world, as well as criticising the uncontrolled advance of science and technology. Before this, few books had been as successful as Carson's was in delivering this message to the American public. Although she described several pesticides (this is a catch-all term for insecticides, herbicides, fungicides and so on), she focussed on one in particular —

⁴⁵⁹ Nicholson, *The New Environmental Age*, p. 47.

⁴⁶⁰ The National Parks Commission, Eleventh Annual Report, 1960, p. 50.

Nicholson, *The New Environmental Age*, pp. 47-48.

⁴⁶² 'Management of Wildlife as a Natural Resource', p. 27, prepared for the Stockholm Conference, 1972, The Nature Conservancy, FT8/9, TNA.

⁴⁶³ Lutts, 'Chemical Fallout', p. 211.

dichlorodiphenyltrichloroethane, an insecticide known commonly as DDT. DDT only came into large scale usage at the end of the Second World War, when it was seen as a miraculous product, having been used successfully during the war to prevent soldiers acquiring insect-borne diseases. After the war it went on general release in the United States.

At about the same time the American public were becoming increasingly concerned about radioactive fallout from nuclear tests. Some radioactive isotopes had been discovered in the milk of cows, and at Thanksgiving in 1959, the public were warned against eating cranberries due to their high pesticide content (the so-called 'Cranberry Scandal'). Along with the Thalidomide incident, where an allegedly safe drug was found to cause birth defects, there was a growing general mistrust of scientific and industry wisdom. His was further developed in the later 1960s in Britain, as a result of disasters at Aberfan and the *Torrey Canyon* oil spill and with the battle of Cow Green (Chapter 4). However, the slow realisation that perhaps technological advancement had a dark side, had begun.

In June 1963, Carson stood before the House of Representatives and described 'the problem of pesticides' as only one part of a wider problem of 'the general introduction of harmful substances into the environment,' with these chemicals combining with others in water, soil and in our own bodies through food consumption. As well as further echoing themes discussed in Chapter 2, notably pollution of water and the ground, it also reflects a particular concern Carson had about pesticides – that they are absorbed into the human body. When journalists or supporters ever met her in person, the usual question was "And what do *you*

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⁴⁶⁴ *Ibid*, pp. 211-212.

Statement of Rachel Carson before the Subcommittee on Reorganisation and International Organisations of the Committee on Government Operations, 'Environmental Hazards: Control of Pesticides and Other Chemical Poisons', House of Representatives, 4 June, 1963.

eat?" to which she replied "Chlorinated hydrocarbons, just as everybody else does." 466

As Paul Ehrlich has recently claimed, 'Many people have the impression that climate disruption is the worst environmental problem humanity faces, and indeed, its consequences may be catastrophic. But the spread of toxic chemicals from pole to pole may be the dark horse in the race. Carson may have started environmentalism by illuminating exactly the right issue.' Carson's prophetic vision, therefore, had some resonance with Americans at the time and still has an important message today.

In many different periodicals and across the United States, it appeared that everyone had something to say about *Silent Spring* and the use of pesticides. As a result of the book's publication, 'ecology' became part of everyday language. 468 Many critics within industry understood Carson raised issues that could not be victorious or defeated through consumer appeal. Instead they perceived her work as it was actually written – a catalogue of the industry's transgressions. 469 This mistrust was later realised in Britain with the public reaction to the sinking of the *Torrey Canyon* and later still in responses to the television series *Doomwatch* (Chapters 4 and 5). *Silent Spring* illustrated not only specific dangers with the indiscriminate use of pesticides but in more general terms how the activity of humans influences the natural world and how this activity can lead to problems

⁴⁶⁶ Frank Graham Jr., *Since Silent Spring* (London: Hamish Hamilton, 1970), p. 74.

⁴⁶⁷ Paul Ehrlich, 'Silencing the Spring', *ABC Environment*, 2 July 2012 – http://www.abc.net.au/environment/articles/2012/07/02/3535901.htm – accessed electronically 13 October 2012.

Maril Hazlett, "Women vs. Men vs. Bugs": Gender & Popular Ecology in Early Reactions to Silent Spring', Environmental History, 9:4 (2004), pp. 704-705; Linda Lear, 'Rachel Carson's Silent Spring', Environmental History Review, 17:2 (1993), p. 28.

469 Lear, Rachel Carson: Witness for Nature, p. 429. See also D ORD D95 – George Ordish,

⁴⁶⁹ Lear, *Rachel Carson: Witness for Nature*, p. 429. See also D ORD D95 – George Ordish, 'Silent Spring - sifting fact & fable', *International Pest Control* (March/April, 1963), p. 16, Museum of English Rural Life (hereafter MERL), Reading.

and dangers for humans as well. 470 In 1972, The Ecologist magazine published a special edition, 'A Blueprint for Survival'; this was a best-seller and was republished as a book later that same year. 471 Pesticides feature in the analysis in 'Blueprint' and whilst Silent Spring is not mentioned in detail, DDT is discussed. Whilst it is unclear exactly what the direct influences were for 'Blueprint,' Silent Spring, as well as the more general environmental consciousness, and the foundation of the Conservation Society (Chapter 4), were likely candidates. Understanding the effect of the book on the general population is difficult owing to lack of research into the reaction of the book in Britain. Jenny Jones, the London Assembly member for the Green Party has said she was inspired by the book. And several people who have been interviewed for this thesis were aware of it. 472 Michael Allaby, for instance, an editor of *The Ecologist* and one of the authors of 'Blueprint.' was familiar with it. 473

Silent Spring did influence an early story of the world's longest running science fiction television series Doctor Who. First aired on British television in 1963, Doctor Who was an innovative programme aimed at family viewing. Chapter 5 discusses more about science fiction and Doctor Who and the connections between the series and the environment in the 1970s. From the very beginning, however, the series dealt with some environmental ideas. Unfortunately, during the 1970s, the BBC disposed of many of their sources on Doctor Who from the

⁴⁷⁰ Phia Steyn & André Wessels, 'Environmental Non-Governmental Contributions to the Global Environmental Movement, 1962-1992', Journal for Contemporary History, 24:2 (1999), p. 98.

All references from 'Blueprint' will come from the special edition of The Ecologist, rather from the book version of this publication.

⁴⁷² The Guardian journalist John Harris met with Jenny Jones, amongst other candidates standing in the Camberwell and Peckham ward in the 2010 general election http://www.thequardian.com/commentisfree/video/2010/may/05/camberwell-peckhamworkers-revolutionary-party - accessed electronically 12 August 2013. Interview with Dilvs Cluer, 5 April 2012; Interview with Maureen Wroe, 7 June 2012; Interview with Michael Allaby, 30 April 2012; Prince Philip was also aware of the book – answers to questions sent to Prince Philip, received 29 July 2012.

473 Interview with Michael Allaby, 30 April 2012.

1960s and early 1970s, and so little remains of primary sources pertaining to the series from that period. 'Planet of Giants' is still available to view on DVD, but unfortunately no commentary on the storyline from producers or the writers exists, since they had all died before the DVD was produced. However, by using other sources, it is clear how one early story in particular had an ecological theme.

'Planet of Giants,' the first story of the second season and the ninth *Doctor Who* story overall, aired on 31 October 1964. The story involves the Doctor and his companions trying to return to Earth from space. On landing, they explore this new world where they encounter various gigantic creatures (such as bees and worms) which all appeared to be dead. Eventually they deduce that they have actually arrived on earth but have been shrunk to 25 millimetres in size. They encounter a scientist who explains that the creatures have been eliminated by a new insecticide DN6. However DN6 is lethal to any organism it encounters, including humans.

What is interesting regarding the development of an environmental consciousness is the language used in the programme. For instance, after a dead bee falls from the sky, one character claims: 'What worries me is all the different things it's killing. Things that fly in the air, things that move on the ground, things that move under the ground. It's so indiscriminate.' When another states it is wrong to kill creatures such as bees and worms indiscriminately, the Doctor replies, 'Quite so. These creatures are vital to the planet. They are constantly replenishing the earth in which they live' and that 'Both are vital for the growth of things.'

⁴⁷⁴ See the BBC website for a synopsis of this story: http://www.bbc.co.uk/doctorwho/classic/episodeguide/planetofgiants/ – accessed electronically 25 October 2013.

Carson is often misunderstood; she was not totally anti-pesticides, and never advocates in her book a complete withdrawal of all chemicals; rather she was against their indiscriminate use. The use of that word, 'indiscriminate,' several times in the *Doctor Who* story reflects this, and Carson uses it several times in her book. Chapter Ten of *Silent Spring* (discussing the aerial spraying of pesticides) is even specifically titled 'Indiscriminately from the Skies.'

Notably, the comments about creatures like worms and bees being 'vital for the growth of things' reflects real-life examples given by Carson as well as some of the presenters of the BBC radio programme *Nature Parliament* in the 1950s.

**Nature Parliament*, as noted in Chapter 2, was part of 'Children's Hour,' and involved Scott, James Fisher, and Derek McCulloch who would answer questions from children listening at home. It was extremely popular with children, receiving thousands of letters each year. **A75* In a show broadcast on 22 May 1951, a question was posed to the panel about what is the most useful wild animal. Each panel member in turn answered the question. Fisher stated it was the earthworm – it is their job 'to turn the soil over naturally, and Darwin did some wonderful experiments on how big stones gradually sank into the ground because of the work of earthworms turning over the soil, and of course they made air penetrate through every bit of the soil, so as to refresh it, and make everything grow nicely in it. **A76* McCulloch, on the other hand, claimed it was the honeybee. **A77* In the third chapter of **Silent Spring*, 'Elixirs of Death,' Carson described how of all the

⁴⁷⁷ *Ibid.*

⁴⁷⁵ BBC Accounts and Annual Report, 1946-1947 (Cmnd. 7319), p. 9.

Transcript of 'Nature Parliament', 22 May 1951, F.285, Papers of Sir Peter Scott, GB0012, CUL.

inhabitants of the soil, 'none is more important than the earthworm.' Similarly, she claimed that chemicals were 'fatally poisoning bees.' Similarly,

Not only was the fictional DN6 lethal, and deadlier than radiation, it had been made 'everlasting,' a criticism also directed at DDT. Carson warned about the incidence of chemicals in soils entering the food chain, chemicals which might have been used decades before, but a residue of which still persisted. In 1969 penguins in Antarctica were found to have significantly raised levels of DDT in their bodies as a result of eating contaminated fish. 480 In 1963, Julian Huxley noted that pesticides did not just affect birds; he described how they affected all living things. 481 This is a stance Carson also took in her work. Whilst the very title of Silent Spring comes from the idea that, when all the birds have died due to their exposure to pesticides, the spring will be silent, nevertheless her work focused on many different animals and plants which were affected by chemicals. She evens claims that we - as humans - have been and are being affected by them. 482 These comparisons between the 'Planet of Giants' story and Silent Spring indicate that the latter work did have some influence in Britain. Overwhelmingly, however, when compared with the United States, the response in Britain was far more restrained.

What the book did not achieve

Studying *Silent Spring* in the British context is important because it is viewed with great regard in the United States as the book that launched the modern environmental movement. Yet an analysis of some of the influences of the

⁴⁷⁸ Carson, Silent Spring, p. 63.

⁴⁷⁹ *Ibid*, p. 15.

Anon, 'Environment: More DDT in Antarctic penguins', *The Times*, Saturday 16 August 1969, p. 17.

⁴⁸¹ John Davy, 'Menace in the Silent Spring', The Observer, 17 February 1963, p. 21.

Carson, *Silent Spring*, various (pp. 147-152 for chemical residues in food).

environmental movement in Britain shows the reasons why the book had a different impact here, and cannot be framed under the same terminology, 'the book that launched the modern environmental movement' – largely because an environmental consciousness already existed and measures were already being put in place to deal with issues which Carson described.

It has been noted in Chapter 2 that the Nature Conservancy became an important research organisation in the 1950s, and through their research stations they assessed environmental threats to Britain's countryside, including the use of pesticides, before Carson had published her work. The Conservancy produced a film *Pests or Plenty* in conjunction with Shell, which was first shown on 11 September 1962 (even before *Silent Spring* was published in monograph form in the United States). The film discussed the problems of increasing crop yields and the use of chemicals to assist this, and looked at the issue from the points of view of a farmer, entomologist and nature lover. It sought to try and find a workable balance between the different competing interests. This is further evidence that an environmental consciousness was increasing independently of Carson and that *Silent Spring* only had a limited amount of information to offer British scientists.

It was during the 1950s that the dangers of pesticides on wildlife became apparent. In 1952, the Agriculture (Poisonous Substances) Act had been passed and the following year questions were raised in Parliament about the toxic effects of chemical sprays. Whilst this was mainly to protect workers from potentially dangerous chemicals, it does demonstrate that government officials were aware of

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⁴⁸³ Bocking, *Ecologists & Environmental Politics*, pp. 39-40, 54-55.

⁴⁸⁴ The Nature Conservancy Annual Report, 1962, pp. 98-99, F6/12, TNA. See also British Film Institute – http://explore.bfi.org.uk/4ce2b756f148d – accessed electronically 9 September 2013.

September 2013.

House of Commons Debate, 'Chemical Sprays (Toxic Effects)', 19 February 1953, vol 511 cc1448-9 – http://hansard.millbanksystems.com/commons/1953/feb/19/chemical-sprays-toxic-effects – accessed electronically 10 April 2013.

the toxic nature of chemicals.⁴⁸⁶ The problem was that chemicals that had been cleared had only been approved to be used in specific circumstances. There was nothing to prevent someone safe behind protective clothing using them, spraying a lethal dose in a moment.⁴⁸⁷

A letter to the editor of The Guardian in 1954 warned of the 'danger to our wild flowers from the present-day hormone weed-killers.'488 Local councils across Britain began spraying pesticides on the grassy verges alongside main roads. Gloucestershire County Council, the first local authority to make large-scale use of spraying on grassy verges along roadsides, had begun this process in the 1940s as a result of a shortage of labour. By the time the Nature Conservancy had been established, there was concern in nature conservation circles over the spraying of these verges, and the damage done to hedgerows, which provided for many different creatures. In the early 1950s, some areas began to be set aside for study into the effects of spraying. 489 In 1955, the Ministry of Transport and the Conservancy reached an accord as to how spraying might be regulated. Local authorities were informed that the Conservancy did not mind them spraying so long as four conditions were met (that only A roads were sprayed; that only a width of 10 feet from the road's edge was sprayed; that no spraying would occur where any unique or interesting species lived; and that spraying was experimental and rules might change later). Locally it was difficult to ensure how these measures were implemented. By 1957 the Conservancy was receiving complaints from

⁴⁸⁶ Agriculture (Poisonous Chemicals) Act 1952, Chapter 60 15and 16 Geo 6 and 1 Eliz 2 – http://www.legislation.gov.uk/ukpga/Geo6and1Eliz2/15-16/60/introduction – accessed electronically 10 April 2013.

⁴⁸⁷ Davy, 'Menace in the Silent Spring', p. 21.

⁴⁸⁸ Naomi Mitchison, 'Letters to the Editor: Casualties of the Countryside', *The Guardian*, 22 May 1954, p. 4.

The Nature Conservancy Annual Report, 1955, pp. 15-16, F6/5, TNA.

across the country concerning the indiscriminate and widespread spraying campaigns of councils. 490

The result of these spraying exercises was an increase in bird mortality. Two years before Carson published *Silent Spring*, the Nature Conservancy established a new division to investigate the deaths of these birds, this being the Toxic Chemicals and Wildlife Division. 491 The Conservancy even commented on the publication of a British edition of Silent Spring. The book, it argued, was 'a severe attack on the indiscriminate use of chemicals to control agricultural pests and diseases, and although mainly concerned with the situation in the U.S.A., some of the criticisms and conclusions may be of wider application.' It finished by claiming that there was increasing public concern about the widespread use of pesticides, a sentiment echoed in the National Parks Commission Annual Report of 1960.492

In a House of Lords debate about toxic chemicals in March 1963 in the wake of Silent Spring's publication in Britain, Lord Douglas noted how many pesticides were 'very persistent' in nature and that it was concerning as to the levels of these chemicals which were stored in the human body. 493 In particular. Douglas mentioned how easy it was for chemicals like insecticides and other similar compounds to get into food. 494 At about the same time, two committees were set up – one by the British Trust of Ornithology and the Royal Society for the Protection of Birds, the other by the government, both seeking to investigate the

⁴⁹⁰ Sheail, *Pesticides & Nature Conservation*, pp. 6-15.

⁴⁹¹ Graham Jr., *Since Silent Spring*, pp. 83-86.

⁴⁹² The Nature Conservancy Annual Report, 1963, p. 46, FT6/13, TNA. See also The National Parks Commission, Eleventh Annual Report, 1960, p. 50.

⁴⁹³ Lord Douglas, Hose of Lords Debate, 'Dangers from Toxic Chemicals', 20 March 1963, vol 247 cc1118-220 - http://hansard.millbanksystems.com/lords/1963/mar/20/dangers-fromtoxic-chemicals#S5LV0247P0 19630320 HOL 34 – accessed electronically 6 November 2013. ⁴⁹⁴ *Ibid*.

effects of pesticides on birds. Lord Shackleton claimed that this was 'a very serious matter, because we are interfering ... with the course of nature. Indeed, the chemicalisation of the countryside may have ... [a] profound an effect.'495 In 1961, one Lincolnshire estate found 6,000 birds died in one spring after eating seeds covered in chemicals. 496 This led to a ban on seed dressing being introduced in 1962 (seed dressing involved covering seeds with pesticides). The ban on seed dressing was imposed in spring only, when birds ate the seeds and not for seeds planted in the autumn, when they did not. 497 As was seen in 'Planet of Giants,' when a domestic cat ate the seeds which had been dressed with DN6, it also died, echoing the issue here.

The voluntary Notifications of Pesticides Scheme was introduced in 1957 by the British government. This Scheme, which only applied to agricultural chemicals, obliged 'manufacturers to provide data which ... [went] to the main committee dealing with the subject, the Advisory Committee on Poisonous Substances, which ... [recommended] precautions to safeguard users, consumers, domestic animals and wild life.'498 Pesticide manufacturers informed the government of each new chemical they had produced, before it went on sale. A dossier containing details of the product's composition, toxicity, the method of use and the results of any experiments undertaken into the long term effects, was then passed to two different government committees who would examine it. Neither committee contained a representative of the chemical industry. 499 The Scheme was one that

⁴⁹⁵ Lord Shackleton, House of Lords Debate, 'Toxic Chemicals and Wildlife', 25 April 1961, vol 230 cc807-38 - http://hansard.millbanksystems.com/lords/1961/apr/25/toxic-chemicalsand-wild-life#S5LV0230P0_19610425_HOL_196 – accessed electronically 10 April 2013.

496 Davy, 'Menace in the Silent Spring', p. 21.

⁴⁹⁷ Graham Jr., Since Silent Spring, pp. 85-86.

⁴⁹⁸ Lord Hastings, House of Lords Debate, 'Chemicals in Food Production and Preservation', 15 June 1961, vol 232 cc327-82 -

http://hansard.millbanksystems.com/lords/1961/jun/15/chemicals-in-food-productionand#S5LV0232P0_19610615_HOL_142 – accessed electronically 10 April 2013.

499 Davy, 'Menace in the Silent Spring', p. 21.

the industry 'always abided by,' for fear of a new company appearing and darkening the industry's image, releasing an untested chemical, which might force the government to impose stricter legislation in the regulations of pesticides. ⁵⁰⁰ As a government report noted in 1961, 'firms have ... come to recognise their obligations both to the public and to their own long term interests, especially from the public relations aspect.' During the 1960s the oil company Shell switched voluntarily to less toxic pesticides, largely as a result of the efforts of government lobbying and also because of the mood within the chemical industry. ⁵⁰²

Whilst the publication of *Silent Spring* did force debates in Parliament about toxic chemicals, and an early *Doctor Who* story was heavily influenced by it, it would be another nine years before the series produced an overtly environmental story, 'The Green Death' (Chapter 5).⁵⁰³ At best, the book encouraged debate about the levels of regulation of chemicals, whilst also these debates highlighted how far Britain already was compared with America in regulating pesticides.⁵⁰⁴

For instance, the film *The Living Pattern* produced by the Nature Conservancy in 1962, looked at 'why the conservation of nature in Britain is necessary and the way in which the Nature Conservancy carries out its task.' 505 This film 'contributed substantially' to a more informed public, and was shown

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⁵⁰⁰ Sheail, *Pesticides and Nature Conservation*, p. 188; Subseries within MAF 284 Review of Present Safety Arrangements for use of toxic chemicals in Agriculture & Food Storage: Implementation of Report: Proposed Pesticides Bill ('Copy of Pesticides Bill, 1968'), TNA. ⁵⁰¹ Sixth Report from the Estates Committee, Ministry of Agriculture, Fisheries and Food, 1961, p. 159.

Shell's policy was mentioned by the Royal Society for the Protection of Bird's Senior Conservation Officer James Cadbury in discussion with Penelope Jane Law. This is referenced in Penelope Jane Law, 'The Long-Run Development of Environmental Interest Groups in Great Britain: two case studies', Unpublished PhD Thesis, London School of Economics and Political Science, p. 136.

For Parliament debates about the book, see, for example: House of Lords Debate, 'Toxic Chemicals and Wild Life', 30 May 1963, vol 250 cc958-61 – http://hansard.millbanksystems.com/lords/1963/may/30/toxic-chemicals-and-wild-life#S5LV0250P0 19630530 HOL 68 – accessed electronically 1 April 2014.

⁵⁰⁴ The Nature Conservancy Annual Report, 1963, p. 46, FT6/13, TNA.

The Living Pattern – http://explore.bfi.org.uk/4ce2b69ec397e – accessed electronically 15 August 2013. This film cannot be viewed online.

widely, spending five weeks at the Odeon cinema in Leicester Square and then in Manchester, Liverpool and Birmingham amongst other places. The film showed 'some of the wonders of Britain's animal, reptile, bird and insect life, and the way in which each has a place in the complex pattern of nature, explaining at the same time why conservation is necessary. This demonstrates how important the Conservancy was in increasing an environmental consciousness. *Silent Spring* is often said to have made ecology popular with the public, yet this film did a similar thing to *Silent Spring*, through its discussion of eco-systems (how everything is connected).

In addition to the argument that Carson peddled some sort of pseudo-science, she was also criticised because she was female. Many reviews of *Silent Spring* specifically use the term 'Miss' Carson. It is unknown whether this was deliberate or just the authors' being polite, although the standard practice is usually only to use the surname after the first mention. The use of the title 'Miss' reminds a reader that Carson was female and that not only was she a female but a single female (perhaps implying that a man could not control her as she was hysterical). Not all reviews that use the title 'Miss Carson' were negative, so it is difficult to apply this analysis to every review or reviewer; however when some publications put a picture of a witch on a broomstick to depict Carson on the front of their publications, the message is clear. ⁵⁰⁸

⁵⁰⁶ The Nature Conservancy Annual Report, 1963, p. 2, 108, FT6/13, TNA; See also The Nature Conservancy Annual Report, 1962, p. 98, FT6/12, TNA.

⁵⁰⁷ Anon, 'Industrial Films', *The Times*, Monday 27 August 1962, p. 14.

See D ORD D93 – "Poison by Pesticides", accuses US writer, *International Pest Control* (November/December 1962), pp. 12-13, MERL. For positive reviews of Carson's work, see Frits Weit, 'Review', *AIBS Bulletin*, 13 (1963), pp. 41-42; Daniel Q. Thompson, 'Review', *The Wilson Bulletin*, 75 (1963), pp. 106-107; William H. Drury Jr., 'Review', *The Auk*, 80 (1963), pp. 209-213. See also Clarence Cottam & Thomas G. Scott, 'Review: A Commentary on *Silent Spring'*, *Journal of Wildlife Management*, 27 (January 1963), pp. 151-155; & Norma H. Dill, Elizabeth M. Haines, Joan Hellerman & Robert A. Jarvis, 'Review: "The Spraying Around Us", *Torrey Botanical Club*, 90 (March-April 1963), pp. 149-152. See also Anon,

Carson's former associate Edmund Diamond criticised her in gender terms, implying that she was a hysterical woman. He describes the "Pesticide Menace" as one that Americans wanted to hear – they wanted to be told stories of death and doom and gloom. Diamond's views on the book are clear:

No matter that Miss Carson's conclusions were preconceived; no matter that her arguments were more emotional than accurate. *Silent Spring* became a best seller and a conversational fad, and in Washington a congressional committee met to investigate the "pesticide menace". Implied in this attack on pesticides are the much more serious charges that scientists are ignoring human values, experimenting for the sake of experiments, and upsetting the traditional "natural laws" and the so-called "balance of nature". Caught up in all the noise over *Silent Spring*'s revelations, we tend to forget, perhaps, that the lamentably widespread distrust of scientists and their works is anything but new. ⁵⁰⁹

Diamond also connected issues surrounding the influence of technology, science and industry on society and the environment.⁵¹⁰

Reactions in Britain from MPs and peers to *Silent Spring* and Carson's work more generally, ranged widely from positive to very negative. A debate about pesticides in the House of Lords, aimed to draw the attention of the House to the 'increasing dangers to health and to life arising from the contamination of food, air and water by toxic chemicals used in agriculture, in food processing, in drugs, in industry and in the home.'511 This debate was perhaps triggered by the publication of *Silent Spring*, as it took place just a month after it was published in Britain. Lord Hailsham, Lord President of the Council, Minister for Science, and a Conservative peer, joined in the debate. Hailsham did not think much of the book and stated that

^{&#}x27;Rachel Carson Dies of Cancer; "Silent Spring" Author was 56', *New York Times*, 15 April 1964, p. 1.

Edwin Diamond, 'The myth of the "Pesticide Menace", magazine article, n.d., likely to be 1963, in M.861, Papers of Sir Peter Scott, GB0012, CUL.

Lord Douglas, House of Lords Debate, 'Dangers from Toxic Chemicals', 20 March 1963, vol 247 cc118-220 – http://hansard.millbanksystems.com/lords/1963/mar/20/dangers-from-toxic-chemicals#S5LV0247P0 19630320_HOL_31 – accessed electronically 6 August 2012.

if people wanted to live in a technological world, side effects were unavoidable. He commented that a review in America had described the book as one-sided examples which happened to support Carson's argument. During the debate, Baroness Summerskill (who had opened the clean air exhibitions in Sheffield in the 1950s) accused Hailsham of being 'much too complacent' over his stance towards pesticides and *Silent Spring*. Quoting from an entomological conference in 1960, Summerskill linked together pesticides and the thalidomide scandal:

This authority on the matter [Dr J.L. Martin of the Long Ashton Research Station] is saying that we are so limited in capacity for research and investigation that we must leave it to the manufacturers. I am mindful of those who are prepared to leave the investigation of drugs such as thalidomide to the manufacturers. It has always been said in this field that this work must be left to the manufacturers. ⁵¹⁴

She continued by claiming she disapproved of Hailsham making unfavourable comments about Carson:

My Lords, there is nothing more frightful than ignorance in action, and I was very disappointed to hear the noble Viscount, Lord Hailsham, speak disparagingly of ... Carson. Perhaps he will remember this: it was a woman doctor—Dr. Frances Kelsey—who in the United States refused to allow thalidomide to be distributed. Dr. Frances Kelsey was disparaged in the same way. She was disparaged by the vested drug interests. I remember that one big drug manufacturer in the United States said: "This stupid woman doctor! She will not let us distribute thalidomide". I am quite sure that the vested interests, the interests which are making a fortune out of pesticides and fertilisers, recognise that ... Carson is their enemy. They try to ridicule her, diminish her, in precisely the same way that the drug manufacturers

Lord Hailsham, House of Lords Debate, 'Dangers from Toxic Chemicals', 20 March 1963, vol 247 cc118-220 – http://hansard.millbanksystems.com/lords/1963/mar/20/dangers-from-toxic-chemicals#S5LV0247P0_19630320_HOL_73 – accessed electronically 6 August

⁵¹³ Baroness Summerskill, House of Lords Debate, 'Dangers from Toxic Chemicals', 20 March 1963, vol 247 cc118-220 –

http://hansard.millbanksystems.com/lords/1963/mar/20/dangers-from-toxic-chemicals#S5LV0247P0_19630320_HOL_101_ – accessed electronically 6 August 2012. 514 lbid.

tried to ridicule and tried to diminish the doctor who refused to allow thalidomide to be distributed in the United States.⁵¹⁵

Concluding, she stated that there 'should be an independent authority for pesticides ... and these materials which contain toxic chemicals; and an independent authority, also, to examine drugs which are made and sold for human consumption. These authorities must be independent of the commercial interests, and the substances must be tested and supervised by these authorities.' This indicates a continuation and connection with the air pollution issues discussed in Chapter 2. Edith Summerskill, then a Member of Parliament, and now a peer, was a strong supporter of clean air policies and even opened and attended Sheffield's clean air exhibition. Summerskill was highlighting the plight of females in positions of research who would otherwise be ignored. She was inferring that Carson was criticised because she was female. 517 The connection between thalidomide and

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⁵¹⁵ *Ibid*.

⁵¹⁶ *Ibid*.

⁵¹⁷ In the 1950s, Martin Pugh argues, there was a revision of arguments of domesticity with a trend towards marriage and having babies saw women encouraged to stay at home. See Martin Pugh, 'Domesticity and the Decline of Feminism, 1930-1950', in British Feminism in the Twentieth Century, edited by Harold L. Smith (Amherst: The University of Massachusetts Press, 1990), p. 162. See also Elizabeth Meehan, 'British Feminism from the 1960s to the 1980s', in British Feminism in the Twentieth Century, edited by Smith, pp. 189-204. Meehan describes a resurgence of feminism in the 1960s, implying that it was within the context Pugh described – the push towards women staying at home and women rebelling against this - that saw feminism grow from then. The 'second-wave' of feminism began in the late 1960s. Whilst it is difficult to pinpoint exactly when, Imelda Whelehan argues that it was likely to be around 1968. In Britain, that year marked the fifty years of women's suffrage. After two world wars, where women had taken on an increasingly visible role in the workplace, it was hoped that the post-war years would continue this trend and usher in a new age of women's rights. Rather, as Whelehan notes, a retroactive shift occurred and the 'cult of the housewife' resurfaced. The domestic environment was once again deemed to be a woman's place. In the 1950s and 1960s, housewives were portrayed as competent businesswomen surrounded by labour-saving devices; the housewife was projected as a skilled, highly technological industry. Housewives had autonomy and responsibility, with major purchasing powers for the household, and was targeted through commercial advertising (which reveals something of the consumerism of the post-war period). The image of a housewife being a person with high standards of domestic organisation was displayed throughout the media; an image which was increasingly hard to live up to, unless, of course, the role was taken up as a full-time job. Those women who bucked the trend - women like Carson - found that the labour market was unequal and society was working against her position in the workplace. It was within this context, that the criticism levelled at Carson, appeared. Because she was not married, and worked in a maledominated profession, it was seen as unnatural and wrong - see Imelda Whelehan, Modern Feminist Thought: From the Second Wave to 'Post-Feminism' (Edinburgh: Edinburgh University Press, 1999), pp. 4, 6, 7.

the environment should not be ignored. During the thalidomide scandal, pregnant women took a drug which they thought to be safe, because medical authorities and scientists – supposed experts – said it was. It was only later that these women learnt the truth. It infers that because thalidomide was a drug used exclusively by women, it did not really matter what the results were as they were not affecting men. Similarly, it is only after the passage of time that environmental destruction is often discovered. In both the thalidomide case and in the events Carson described, the perceived wisdom was that using the drug or using pesticides had no negative effects. By calling for 'an independent authority for pesticides,' Summerskill echoed Carson's concern about unregulated and uncontrolled scientific and technological discoveries. This was built on in the later 1960s when the battle at Cow Green and the *Torrey Canyon* increased public concern about the role of technology in society (Chapter 4). It also foreshadows some of the arguments put forward in the 1970 BBC drama series *Doomwatch* (Chapter 5). This was an 'independent authority' not just for pesticides but to monitor science and technology more generally.

During the Lords debate in March 1963, it was pointed out that Carson had been referred to as 'Doctor' when she did not hold a PhD, and it was claimed by one peer that she was more of a writer than scientist. At this point, Lord Shackleton responded by stating, 'Carson is a graduate in biology. ... She is a qualified biologist, who worked for a long time with a United States agency in this field, and specialised in the end in the public relations side of it. This does not mean that she is not a competent scientist.'

⁵¹⁸ Lord Shackleton, House of Lords Debate, 'Dangers from Toxic Chemicals', 20 March 1963, vol 247 cc118-220 – http://hansard.millbanksystems.com/lords/1963/mar/20/dangers-from-toxic-chemicals#S5LV0247P0_19630320_HOL_156 – accessed electronically 6 August 2012.

Silent Spring did have an impact on environmental thought and brought environmental ideas to people who might not have previously considered them; it was, in the words of Linda Lear, a 'revolutionary environmental thesis of ecology'; but in Britain, the book had a rather more stunted reception. Ecology had begun to be more widespread within certain scientific circles and many of the arguments Carson made were already in the minds of British scientists. The environmental awareness which had existed in the 1940s and 1950s, as described in Chapter 2, grew in the public consciousness further in this period through the organisation, the Council for Nature and with the pressure group WWF. Whilst recognising the huge impact of *Silent Spring* in America, the response in Britain, although more muted overall, fed into a growing awareness of the natural world that eventually bore fruit in the environmental movement of the 1970s.

Natural Environment Research Council (NERC)

Returning to the wider picture, in 1965 the Nature Conservancy ceased to exist as an independent body; instead it became part of the Natural Environment Research Council. This organisation itself was established that year from an amalgamation of different environmental research organisations and surveys, including the Nature Conservancy, the Geological Survey of Great Britain, the National Institute of Oceanography, and the Hydrological Research Unit. Yet the incorporation of the Nature Conservancy into a wider body, to support and promote research into ecology and Earth sciences, demonstrates an understanding of the importance of conservation at the highest levels. It was hoped, for instance, that by bringing all these difference bodies under the auspices of one organisation, they will have 'a

Linda Lear, 'Rumblings of an Avalanche: The Legacy of *Silent Spring*', Invited Lecture, McGill University, Montreal, Canada, 18 September 2012. I am grateful for Dr Lear's permission to quote from her lecture.

permission to quote from her lecture.

520 History of NERC – http://www.nerc.ac.uk/about/work/history.asp – accessed electronically 22 January 2014. See The Natural Environment Research Council Annual Report, 1965, pp. 1-2, FT6/15, TNA.

new sense of community of purpose, and enable each of them to achieve even greater things.'521 The Conservancy could collaborate better with other organisations, and reflects the more inclusive nature of environmentalism which emerged in the late 1960s. The problems of the environment, the first Annual Report of NERC commented, 'are of prime importance.'522

Yet up to that point, there had been no single agency which had been responsible for all the problems 'although a variety of bodies ... have been concerned with different aspects of them. There has, therefore, been a danger not only of faulty co-ordination but of sore neglect of those areas which fall outside the day-to-day interests of Departments and local authorities.'523 With all these different bodies coming under one roof (metaphorically), NERC was designed to mitigate some of these issues in order that many environmental problems could be solved. This is a precursor for 1970 – that year, the new Department of the Environment was established, similarly bringing together different former Departments under the control of one Secretary of State. It has also been commented that in the 1970s, the environmental movement was more inclusive than earlier environmental pressure groups had been; concerned not only with one environmental problem, such as air pollution, or wildlife protect, but a host of them. It also criticised those who polluted as well as pollution. There was a move away from the management of nature toward a different way of living, in harmony with nature rather than exploiting it. Through the creation of NERC, the government first gave an example of the environmentalism of the future, auguring the later 1960s when environmental ideas gradually became more inclusive. This

 $^{^{521}}$ The Natural Environment Research Council Annual Report, 1965, p. 1, FT6/15, TNA. 522 lbid, p. 3.

⁵²³ *Ibid.*

environmentalism was to involve many problems and solutions from different disciplines.

Prior to 1965, issues such as air pollution or nature conservation, anti-litter or river pollution, wildlife protection or pesticide problems had all been largely regarded as single issue problems, and as such those pressure groups which emerged to deal with them were also single-issue, reactive groups. From studying the Annual Reports of the NC from its inception up until 1965, it is revealed that pollution was only referred to in terms of rivers or through litter or pesticide use. It was in this period – in the mid-1960s – that conservationism began to evolve into environmentalism. As a result of the formation of NERC, a shift in understanding occurred, so much so that by 1970, the Annual Report of the Natural Environment Research Council claimed that its responsibility for pollution research lay in the effects of all types of pollution on the natural environment and on wildlife. ⁵²⁴

Conclusion

The pesticide menace, articulated by Rachel Carson, was a post-war concern, with DDT going on widespread public sale after the Second World War. Whilst hunting in Africa had occurred often in the later nineteenth and early twentieth century, the 1950s and 1960s saw a move from shooting with a gun to shooting with a camera, evidenced through the growth of nature conservation programmes and through organisations like WWF. 525 When studying WWF, it is clear that both their resources and the wider political environment played a part in the group's success. It appeared in a period of growing environmental awareness in society, through the National Nature Weeks, and the Council for Nature, in addition to the

⁵²⁴ The Natural Environment Research Council Annual Report, 1970, p. 2, FT6/15, TNA. ⁵²⁵ For more on hunting in nineteenth and early twentieth century Africa, see John M. Mackenzie, *The Empire of Nature: Hunting, Conservation and British Imperialism* (Manchester: Manchester University Press, 1988).

increasing nature television programmes. Yet, the group also skilfully used their resources, expertly exploiting the media and launching on the pages of the most read newspaper in that period. They attracted 'armchair' conservationists – those who were attracted to helping nature but who did not necessarily want to be active. The 'Wildlife Youth Service' in particular appealed to young people, and succeeded in educating them and others in conservation practices. This was not a period of the environmental movement – Rootes' broad networks did not yet exist – and there was still a sense – particularly through WWF – of single-issue concern; the inclusive environmentalism of the later 1960s, evidence in part of the movement's presence – had not yet appeared. Yet this period was one of growing concern about the environment and the nascent environmental lobby growing and moving into new areas.

Through the Council for Nature and the National Nature Weeks, along with the growth in number and popularity of nature conservation television programmes, environmental issues grew in the public's consciousness. WWF saw a swing towards popular conservation. With a wider environmental awareness in society, achieved through the issues discussed in Chapter 2, as well as through those case studies above, nature conservation entered a new era with a greater awareness in the public mind-set to the issues that affected the natural world. The consciousness which developed in the 1940s and 1950s (along with television programmes like *Look* and *Zoo Quest*), meant that WWF was immediately popular. This popularity also helped the National Nature Weeks to show how conservation was becoming an accepted and well-liked principle in society. WWF was a traditional, moderate, reactive pressure group, functioning along similar lines to the National Smoke Abatement Society in the 1950s. Yet it also used the media successfully and set the tone for later more proactive pressure groups, like

Friends of the Earth, who also did this. The response to *Silent Spring* reveals the extent to which conservationism was already a growing part of the public's consciousness. With the creation of NERC, the single-issue conservationism of the 1940s, 1950s and early 1960s came to an end, being replaced by the more inclusive and bio-centric environmentalism.

By 1970, this inclusivity and bio-centric approach was the main thrust of the environmental movement and it is largely how it operates today. Before this, however, events in the latter half of the 1960s increased people's environmental consciousness to the point where they did overtly link social and environmental issues together. It was the Conservation Society which began to link issues of pollution and conservation with a critique of society. A campaign to stop the construction of a reservoir in a bleak area of Cumbria and County Durham proved largely unsuccessful. Instead, it was the Torrey Canyon oil spill, which played out in front of the media, which heightened people's consciousness and forced them to question society's reliance on technological, industrial and scientific innovation. These all set the tone for the movement which shifted to the centre of British society by 1970 and became familiar with that which exists today. In their 1967 report, the Natural Environmental Research Council claimed that there were two events which 'concerned conservationists during the year, both of which forcibly illustrated the effects of man's activities in a highly industrialised environment and emphasized the need for the introduction of ecological principles.'526 The first of these was Cow Green. The second was the Torrey Canyon disaster. Both are analysed in the following chapter.

⁵²⁶ The Natural Environment Research Council Annual Report, 1967, p. 10, FT6/15, TNA.

Chapter 4 – Cow Green, the 'Battle of the Holiday Coast' and the Conservation Society: from conservationism to environmentalism, c.1965-1969

In her analysis of the construction of the reservoir at Thirlmere, in the Lake District, historian Harriet Ritvo notes that with a growing human population and economies geared towards long-term growth, the fight at Thirlmere will not become 'less intense any time soon.'527 The Thirlmere problem occurred at the end of the nineteenth and beginning of the twentieth century. It was originally proposed to give Manchester access to more drinking water. Despite criticism from different quarters, the reservoir was constructed and the battle was lost. There are echoes of this in the 'battle of Cow Green' which took place in the mid-1960s. This also involved reservoir construction, only this time it was not in the Lake District but in a barren part of the Pennines on the border of Cumbria and County Durham. Like Thirlmere, Cow Green saw a clash between naturalists and industrialists. However there is one important difference – Cow Green followed a growing environmental consciousness in the 1940s, 1950s and early 1960s (Chapters 2 and 3), and provided the public with an example of the failures of industrial society.

Between 1945 and 1951, the post-war Labour government established

Britain's social democratic system – a mixed economy, the NHS and social security system. 528 All these relied on Britain becoming a consumer society. 529

⁵²⁷ Ritvo, *The Dawn of Green*, p. 6.

Like definitions of social movements, definitions of what is meant by the welfare state vary, depending on who uses it. Derek Fraser, however, notes that a welfare state is a system of social organisation which limits free market operations in three ways – by designating certain groups whose rights are guaranteed and welfare is protected by everyone; by delivering services so no citizen should be deprived of them (health, education and so on); and by transferring payments which maintain incomes at times of need. The environment, and particularly the national parks, falls within the second way Fraser describes. Establishing the national parks system allowed all people to access the countryside and experience the natural world – see Derek Fraser, *The Evolution of the British Welfare State: A History of Social Policy since the Industrial Revolution* (London: Macmillan, 1984), Second Edition, p. xxi. Rodney Lowe agrees. He argues that between 1945-1975 – that is, the period covered by this thesis – the welfare state in Britain

'Highly developed consumer goods, often by-products of war-developed technologies – in energy, in electronics, in transport, in synthetics – added enormously to the range of power-hungry machines available to the citizen, particularly the automobile.'530 Rising wages in the post-war period, as well as the range of consumer goods and household technological advancements available in the 1950s and 1960s brought British society closer to that of the United States.

Technology seemed to hold the key to advancement within society and to peace and prosperity. This advent of the technological revolution promised to provide affordable and unlimited energy and create a more equitable society. However, some did not believe this; they were increasingly sceptical about experts and the dominance of a society controlled by technology. Several issues in the later 1960s only reinforced this belief.⁵³¹ Following a record number of deaths of animals from seed dressings and other toxic chemicals, the *Torrey Canyon* disaster, Cow

experienced a 'golden age'. The war left a legacy on Britain which went hand-in-hand with consumerism. The destruction of the war was replaced by a desire to help people and that desire was reflected in the welfare state, through things like the NHS. Within this context of post war welfare, the environment emerged as a concern in some quarters. Whilst environmental concern had precedents in the years before 1945, so too did the welfare state, based on the Beveridge Report of 1942. The National Parks and Access to the Countryside Act of 1949, was the realisation of an interwar idea: 'the creation of national parks and the designation of "areas of outstanding natural beauty". This initiative was the consequence of increased popular leisure and also represented an early concern for conservation' – See Rodney Lowe, *The Welfare State in Britain Since 1945* (Basingstoke: Palgrave Macmillan, 2005). Third Edition, pp. 12, 135-137, 254.

Palgrave Macmillan, 2005), Third Edition, pp. 12, 135-137, 254.

529 For more on consumerism see Hilton, *Consumerism in 20th Century Britain*, pp. 3-4, 309. See also Veldman, *Fantasy, the Bomb and the Greening of Britain*, pp. 4-5; Guha, *Environmentalism: A Global History*, pp. 80-82. Hilton places consumerism within a post-war environmentalist theme arguing that consumer interest in the environment emerged in the post-war period as environmental issues grew in prominence in society (Hilton, p. 309). Already seen in Chapter 2, litter was a problem in the countryside in the 1950s – the increase in volumes of visitors was partly the problem, but also with people having more disposable income and more goods available to be purchased, the volume of litter increased. Technologies from the war were developed to have peacetime properties, which coupled with better working conditions, higher pay, low unemployment and baby boom meant that more people had more desire to purchase goods, leading to consumerism increasing in society. As already observed above, the number of people with access to television sets increased greatly after the war in the 1950s and 1960s. As technology increased in society, there was increasing concern about its negative effects.

530 Barbara Ward & René Dubos, *Only One Earth: The Care and Maintenance of a Small*

Planet (London: André Deutsch, 1972), p. 60.

531 Veldman, Fantasy, the Bomb and the Greening of Britain, pp. 4-5.

Green, even the concern about thalidomide, all forced people to begin to see the darker side of the technology boom of the 1960s. 532

In October 1966, a slag heap in the Welsh town of Aberfan, near Merthyr Tydfil, collapsed, killing 143 people, including over 100 children. The collapsed heap covered a farmhouse, twenty houses and two schools. The Times described the disaster as 'very like a cataclysm of nature: the convulsive precipitation of vast quantities of matter, the extinction of life, obliteration, and then the awful silence in which, in the words of one who witnessed it, "you couldn't hear a bird or a child." They perceived the disaster to be an environmental one – that of dumping waste which was 'one of the ugliest features of the industrial rape of the environment ... These huge heaps of the detritus of industry, towering over villages and farmsteads, dehumanising the environment and even threatening human life, are grim symbols of the false values of an acquisitive culture. The quote from The Times – "you couldn't hear a bird or a child" – reflects back to Silent Spring but also, significantly, it also foreshadows the Torrey Canyon oil spill in 1967. One of the most lasting images of this event was that of oil soaked birds.

Although Aberfan was described as 'one of the ugliest features of the industrial rape of the environment' this could equally be applied to the two events described in this chapter – the battle at Cow Green and the *Torrey Canyon* disaster. The reservoir constructed at Cow Green was very much a 'rape of the environment,' destroying many ancient and unique plants. People who objected to the reservoir did so on the belief that if they did not stop the construction there was no knowing where else would it lead. What would be next? Similarly, the *Torrey*

⁵³² Lamb, *Promising the Earth*, p. 33. See also Sandbrook, *White Heat*, pp. 300-303.

⁵³³ Cledwyn Hughes, House of Commons Debate, 'Aberfan Disaster', 24 October 1966, vol 734 cc643-9 – http://hansard.millbanksystems.com/commons/1966/oct/24/aberfan-disaster#S5CV0734P0 19661024 HOC 221 – accessed electronically 15 April 2013.

534 Anon, 'The Black Tragedy of Aberfan', *The Times*, Friday 4 August 1967, p. 9.

³³⁴ Anon, 'The Black Tragedy of Aberfan', *The Times*, Friday 4 August 1967, p. 9
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Canyon was a 'rape of the environment' with the oil consuming everything in its path and destroying the local tourist and fishing industries. It was the first post-war environmental disaster at sea and virtually every report of oil spills since then has referred to the *Torrey Canyon*. Since With television news playing an ever larger role in people's lives (compared with newspaper coverage), the Aberfan and the *Torrey Canyon* disasters played a significant role in 'relaying the plight and circumstances of those involved' to the general public. Furthermore this 'rape' was precisely what the Conservation Society was established to fight against. Whilst the complex broad networks which define the movement did not yet exist, this was a period when pressure groups adopted environmentalism over conservationism.

In Chapters 1 and 2 it was noted that the concept of the environment did not simply appear after the war. Rather attitudes towards the environment changed. The later 1960s represented another shift but crucially as this chapter argues, this shift was not a complete set of new ideas, rather it was simply that environmental issues began to be recognised as being connected; there was a more inclusive outlook with regards to environmental destruction. This was reflected in the environmentalism which emerged in this period. More than any other chapter within this thesis, this chapter is of particular importance. Whilst Chapter 2 traced the immediate post-war influences of the British environmental movement, Chapter 3 described the continuing growth of environmental concern, and Chapter 5 reveals how the movement came to fruition, it was in the late 1960s when the idea of the inclusiveness of environmental issues and that humans were responsible for many problems began to take hold — evidenced in the creation of

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⁵³⁶ Cowan, Oil and Water, p. 229.

John Sheail, 'Torrey Canyon: The Political Dimension', Journal of Contemporary History, 42:3 (2007), p. 486. Jack Williams claims that, from 1960, people spent more time watching television than any other leisure activity. Whilst in the immediate post-war years, television was a novelty, by the 1960s it had become part of everyday life. By this decade, television was rivalling radio and newspapers as the major form of mass communication – see Williams, Entertaining the Nation, pp. 1, 26, 93.

the Conservation Society, which was somewhat critical of the technological revolution, and in the creation of *Doomwatch* in February 1970. There was a view that technological dependence was a bad thing, a problem rather than a pleasure and sought to do something about it; an understanding that the environment was being 'raped' by humans and this 'rape' was increasing in frequency and scale. Members of groups such as the Conservation Society took these ideas into the 1970s when the environmental movement became more inclusive, ecological and moved to the centre of British social and political thinking. ⁵³⁸

This chapter analyses three issues – Cow Green, the *Torrey Canyon* disaster and the pressure group the Conservation Society. The 'rape of the environment' resulted in a new way of seeing the world, as this chapter seeks to demonstrate. It reflects a changing trend in environmental ideas, focusing on the Cow Green controversy and the *Torrey Canyon* disaster. The former gave the public an example of what industrial development could do to nature if unchecked. Cauldron Snout, the location of the Cow Green reservoir, in the Pennines, was a place that many members of the public had never heard of, let alone visited. Yet in the debates which followed, the public – or sections of it – became informed and educated in issues concerning industrial expansion and the costs of it to the natural world, which fed into wider public awareness of environmental problems. This was further and more explicitly seen in the *Torrey Canyon* disaster which revealed the extent of our desire to consume more.

With the anti-technological concern came an awareness of more inclusive environmental problems, which propagated in the 1970s. This can be witnessed

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⁵³⁸ Lord Henley described many different environment problems of the late 1960s and which would dominate the 1970s, including Cow Green and the expansion of motor vehicle usage. See Lord Henley, House of Lords Debate, 'Development and Threats to Amenity', 19 February 1969, vol 299 cc821-904 –

http://hansard.millbanksystems.com/lords/1969/feb/19/development-and-threats-to-amenity#S5LV0299P0_19690219_HOL_100 — accessed electronically 4 September 2013.

most clearly in the Conservation Society. This group, launched in 1966, wanted 'to arouse the awareness of man' so he can protect 'not only the earth, but himself, and his whole environment.'539 The Society was a very 'effective environmentalist organisation in Britain.'540 As a memorandum of Parliament's Select Committee on Science and Technology noted, the Conservation Society:

Was founded in November, 1966 in the belief that it was essential to tackle the basic causes of our environmental malaise. Environmental quality is under pressure from two main sources: a growing population and the uncontrolled use of technology. Our advanced technology means that never before has man had the capacity to make such an impact on the environment, while the tremendous increase in world population means that never before have there been so many people to use the available technology. 541

Membership peaked in the early 1970s, and included prominent environmentalists of the 1960s such as Paul Ehrlich and Barry Commoner. It spoke out against the Torrey Canyon disaster and produced literature about a host of different environmental problems. In this pressure group, people saw an organisation which was established to deal with these issues head on: the Society saw that the problem was not just about oil pollution, nor the destruction of the natural world (through the siting of a reservoir), nor population growth, but all these things and it joined them together, arguing society had to solve all the problems to live in a more sustainable way. It was not enough to solve one, as the others would still be there. It was also a proactive group, not influenced by any particular event or problem, but established from a general anxiety about environmental destruction in general.

Lady Eve Balfour, 'Inaugural address to the Conservation Society', 26 November 1966, p. 1, MD8073 Acc. 1999/63, The Conservation Society, SCA.

540 Sandbrook, *White Heat*, p. 303.

541 Appendix 9, 'Why Britain Needs a Population Policy: Memorandum by the Conservation

Society', Select Committee on Science and Technology, Session1969-1970, p. 287.

The case studies in this chapter are significant landmarks in the development of an environmental consciousness. The later 1960s reflected a new way of viewing the world. With the Earthrise image of 1969, which was a photograph of Earth taken from space by astronauts on the Apollo missions, some people (such as Sandy Irvine) saw the planet as one where everyone and everything was connected. As Irvine noted, the image of the moon (he described as a 'dead planet') in front of the Earth (a vibrant, living one) suggested to people what might happen to our planet if we continued to destroy it.⁵⁴² As described in the previous chapters, people were beginning to develop environmental responses to problems such as air pollution; these were, however, overwhelmingly, viewed as single issue problems. It was during the later 1960s when conservationism's transformation into environmentalism was completed.

January 1960 saw a collision off the Portsmouth coast between the oil tankers Gorm and the Santa Alicia which resulted in 1,200 tons of oil being spilt. That July there was another incident at Milford Haven and later a 26,000 tonne tanker Bideford left a valve open whilst pumping oil on board at Fawley, polluting the sea around Southampton. These were miniscule in comparison with the incident on 18 March 1967, when the approximately 120,000 tonne *Torrey* Canyon, one of the largest oil tankers in the world, struck a reef off the Cornish coast.543

The sinking of the tanker polluted vast swathes of the Cornish coast causing great damage to much of the local wildlife, including a great number of birds. Like the London smog disaster of 1952 and associated anti-air pollution campaign, the *Torrey Canyon* disaster highlighted the price of industrial

⁵⁴² See Robert Poole. Earthrise: How Man First Saw the Earth (London: Yale University Press, 2008), pp. 7-8; Interview with Sandy Irvine, 3 April 2012.

543 Nicholson, *The Environmental Revolution*, p. 244.

development and how it adversely affected the environment. Television ownership had mushroomed between 1952 and 1967, with more people owning and watching television than ever before, which meant the coverage of the latter disaster was far more widespread than the former, and more people became aware of it. ⁵⁴⁴ For instance, in 1961, Nicholas Abercrombie states, men in full-time employment spent an average of 121 minutes per average day watching television, compared with 23 minutes listening to the radio and 28 reading a book or newspaper. With women in full-time employed, the figures were slightly less, with 93 minutes spent watching television, 16 listening to the radio and 13 reading a book or newspaper. ⁵⁴⁵

There was also a greater concern about the effects of industrial growth on the environment, than had been present in the 1950s air pollution campaigns. The *Torrey Canyon* disaster 'shocked Europeans into the realisation that they faced the same environmental problems as the United States.' The environmental consciousness that had been emerging since the 1940s and growing over the next two decades fed into this concern. Its influence was far reaching; as seen in Chapter 5, the public response to the BBC television series *Doomwatch* was significant, and that series drew on issues such as the *Torrey Canyon* disaster for its storylines.

The Battle of Cow Green

Historian Roy Gregory has defined how environmental ideas changed from the mid-1960s in Britain:

⁵⁴⁴ Williams mentions a rise in television ownership in the post-war period. See Williams, *Entertaining the Nation*, pp. 14, 24, 26.

⁵⁴⁵ Abercrombie, *Television and Society*, p. 148.

See Mark Stoll's online exhibition on the website 'Environment and Society' – http://www.environmentandsociety.org/exhibitions/silent-spring/silent-spring-exhibition-overview – accessed electronically 21 November 2012.

By the middle sixties the importance of conservation and ecology was becoming far more widely understood and acknowledged ... and by now, industrial development that threatened amenity was more likely than in earlier years to attract the attention of the mass media. Many of those drawn into the Cow Green controversy neither knew nor cared about the minutiae of the dispute. It was the principle that mattered. 547

Cow Green is included in this chapter because of this principle. The principle that industrialists should not be able to build wherever they want to the detriment to the environment; the principle that technology should not and could not be seen as a panacea for all of society's ills – that it also caused problems. Whilst the *Torrey* Canyon oil spill was far larger and attracted far more public support, as the New Scientist claimed, Cow Green was 'one of the early skirmishes which led up to the environmental revolution of the 1970s.'548 Yet few of those authors who write about this 'environmental revolution' consider Cow Green at all. 549

Don Kent, former activist and member of the 1970s pressure group SOC'EM, supports the New Scientist's view. He has described the battle of Cow Green as the first time that conservationists and industrialists clashed after the Second World War. 550 It was certainly an event which influenced him to study environmental studies at university. Whilst Cow Green can also be placed into a similar context to Ritvo's analysis of the earlier issue of Thirlmere – namely that an expanding population needed more water (although in the latter case this was for industry rather than for drinking) and in both cases those campaigning against the reservoirs tended to be middle class academics or intellectuals - Cow Green should also be viewed in the wider context of the post-war period. Already in the previous chapters it has been shown how an environmental consciousness had

⁵⁴⁷ Gregory, *The Price of Amenity*, pp. 161-162.

⁵⁴⁸ Jon Tinker, 'Cow Green twelve years on', *New Scientist*, 4 May 1978, from 628.1/L185 Pamphlet box, Durham Clayport Library (hereafter DCL), Durham.

Neither Christopher Rootes, Adam Lent, Meredith Veldman or others discuss Cow Green or even refer to it briefly.
550 Interview with Don Kent, 10 April 2012.

begun to emerge after the Second World War. Increasingly as the 1960s progressed, the technological revolution which had emerged after the war with the consumer society had begun to be questioned.⁵⁵¹

In Chapter 2, there was discussion of the stirrings of an environmental consciousness in the late 1940s and 1950s through describing ideas about air pollution (which mainly affected urban areas) and nature conservation (mainly affecting the countryside). Nature conservation issues and air pollution in the 1950s had been largely separate, individual issues, not often overlapping with each other. Here, however, the boundaries between the two became blurred. What Cow Green did was move the focus to both rural and urban areas. In Cow Green, urban activity encroached into the countryside, through reservoir construction. During the 1970s, whilst this distinction between rural and urban still existed, groups emerged which crossed both these divisions and concerned themselves with conservation and anti-pollution efforts wherever they arose. In the 'Plant a Tree in '73' campaign, for example, urban dwellers were encouraged to plant trees in urban areas, to bring the countryside into the city (Chapter 5). 552 Cow Green began that process by bringing industrial development to the countryside. Whilst the issue of the reservoir at Thirlmere had had a similar effect at the beginning of the twentieth century, the environmental consciousness which had grown in the post-war period meant it had a greater impact.

In Cow Green, people were not merely exposed to a small group of naturalists protesting against the construction of a reservoir in a barren stretch of moorland; rather they saw a David and Goliath fight between those who were

⁵⁵¹ Veldman, Fantasy, the Bomb and the Greening of Britain, pp. 4-5.

⁵⁵² 'Plant a Tree in '73' was designed somewhat to mitigate the growth of the 'concrete jungle' – this phrase itself was a conjunction of two ideas – concrete indicating the urban environment and jungle the rural, wild one (see Chapter 5 for more information on this).

concerned about the advent of a more technological society and those who supported it. It became clearer to people that humans were destroying the planet, and they began to ask why the environment was being destroyed in this way. This was not necessarily a bad thing. It represented a wider change in thinking about the environment. Whilst it did not happen overnight, the reactions to Cow Green began to indicate a concern about more inclusive environmental issues (not just a focus on one environmental problem, but linking different issues together). This is indicative of the movement in the 1970s, as it is today (Chapter 5). Yet the process began with Cow Green and with the *Torrey Canyon*. The issues which Cow Green raised were taken up specifically by Lady Balfour in the inaugural address of the Conservation Society in 1966. She referred to the Society as David contrasting with industry as Goliath. 554

In November 1966, the *Illustrated London News* ran a piece entitled 'Industry Versus Botany,' referring to the 'Battle of Cow Green,' waged between 1965-1966/7 between scientists and industrialists. Felatively little has been written about Cow Green in recent years. This is perhaps because those opposed to the construction ultimately failed to get the reservoir scrapped entirely, nor moved to another location. Gregory, however, does include it in his work on the relationship between conservationists and the government. Indeed, he examines five case studies in his book, of which the Cow Green battle is one. His inclusion in an otherwise sparse field of literature is important because his work specifically analyses environmental conflict between conservationists and government. John Sheail refers to it from the point of view of the Nature Conservancy and its (limited) involvement in it. He even claims that the issues raised by Cow Green were so

⁵⁵³ Gregory, *The Price of Amenity*, p. 162.

Balfour, 'Inaugural address to the Conservation Society', p. 3.

Edward Bacon, 'Industry Versus Botany – in Upper Teesdale', *Illustrated London News*, 12 November 1966, p. 26, 628.1/L185, DCL.

important to ecology in Britain that they warrant discussion by him. The Tees Valley and Cleveland Water Bill (which would allow the reservoir to be built) 'was the "most important test case" to confront the country since the National Parks and Access to the Countryside Act of 1949, which had established the international reputation of the United Kingdom' in progressive conservation thinking. ⁵⁵⁶ Its relative absence from recent literature does not necessarily denigrate its importance, however (it is an important example of the growth of environmentalism in Britain, providing evidence of the more bio-centric concern which existed at this time).

environmental ideas amongst the general population (although activist Don Kent acknowledges that he was influenced by it), the events at Cow Green merit discussion here. Not only was the battle a post-war environmental campaign to protect the natural world, in many ways similar to those which took place in the 1950s about National Parks and Clean Air, it is also important because it gives a snapshot into some of the issues which were important in the later 1960s. It reveals how much ideas about nature conservation had advanced since the end of the war. Peter Scott (conservationist and co-founder of the World Wildlife Fund) and Professor Humphrey Hewer (chair of the Council for Nature) described how Parliament was pandering to industry in approving the reservoir's construction and setting 'an appalling example to the rest of the world.' They noted that the Council for Europe was following the example of the UK and moving away from outmoded ideas of merely preserving the natural world towards the management of natural resources and understanding the environment as a living organism. ⁵⁵⁷ This is

⁵⁵⁶ Sheail, Seventy-five years in ecology, pp. 227, 230.

⁵⁵⁷ Peter Scott & Humphrey Hewer, 'Letters to the Editor: Nature Conservation', *The Times*, Wednesday 6 July 1966, p. 13.

evidence of the changing environmental beliefs in Britain (the evolution of conservationism into environmentalism). By framing their arguments within a biological context, those against the reservoir at Cow Green adopted a more environmentalist approach. It is important to consider in this thesis therefore because although it provides a case study of a campaign which failed, it was also the first time there had been a serious conflict between industrialists and conservationists after the war and arguments against the reservoir were more biocentric.

In the early 1960s, the main Teesside plant of Imperial Chemical Industries (ICI) was the single biggest ammonia plant in the world, and an important part of the local economy. With expansion planned, more water was required to feed new factory areas; the factories already consumed 25 million gallons of water a day, with nearly half used directly in the chemical process, the same amount used in cooling and the remainder for other uses. A further 25 million was required. ⁵⁵⁸ ICI contacted the Tees Valley and Cleveland Water Board to discuss locations for the building of a reservoir which would supply their needs. One such location was Cow Green, an area of land in the Pennines, located on the border between Cumbria and County Durham. It was considered the ideal location due to lack of farmland and barrenness of the landscape. ⁵⁵⁹ However, botanists discovered that Cow Green formed part of 'a unique botanical community. ⁵⁶⁰ The landscape had remained largely unchanged since the Ice Age 15-10,000 years ago. As a result, the botanists argued, some unique flora grew there, growing nowhere else in Britain (although they did grow in Alpine and Arctic regions of the world). The

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⁵⁵⁸ ICI Agricultural Division, 'Water Supplies on Teesside', 1966, A.18229/1 (ICI's Industrial Needs) A, ICI Papers, Teesside Archives (hereafter TA), Middlesbrough.

Gregory, *The Price of Amenity*, p. 136. See also Anon, 'Land of Mists', Newspaper article, 14 April 1967, 628.1/ L185, DCL; Anon, 'Farmers told: fight new reservoir', *Northern Echo*, 17 May 1965, 628.1/L185, DCL; Anon, 'NEDC Executive all for Cow Green', *Northern Echo*, Saturday 8 January 1966, p 5, 628.1/L185, DCL.

Bacon, 'Industry Versus Botany – in Upper Teesdale', p. 26, 628.1/L185, DCL.

plants included *Armeria maritima*, *Carex capillaris*, *Carex ericetorum*, *Draba incana*, *Equisetum variegatum*, *Gentiana verna*, *Juncus triglumis*, *Kobresia simpliciuscula*, *Minuartia stricta*, *Minuartia verna*, *Plantago maritime*, *Polygala amara*, *Polygonum viviparum*, *Primula farinosa*, *Thalictrum alpinum*, *Tofieldia pusilla*, *Viola rupestris* as well as some bryophytes (mosses and similar plants).⁵⁶¹

The scientific community was not so interested in these individual plants, which did not offer much aesthetic value; rather what interested them was the community of plants and how they interacted with their environments and with each other – how the community survived collectively. No one denied that these plants were of ecological significance. What supporters of the reservoir argued was that it would only cover 17 out of 200 acres of this community. Opponents claimed that even that was too much; that the presence of a large body of water (650 acres) would affect both the water table and the microclimate, threatening the entire community. Water engineers countered that the water table would not be affected 'and some ecological experts maintain that the change in the microclimate will be infinitesimal and in any case negligible in view of the great climatic variations to which the plants have been subjected since the Ice Age.' 562

Arguments were also raised that the project threatened the aesthetic quality of the landscape but, as the Stockton *Express* points out, this was a weak argument indeed as the valley 'above the fine waterfall of Cauldron Snout is shallow, brownish, sodden and desolate. It has a beauty – seen by very few visitors, since there is no vehicular road – but it is the beauty of desolation, and it can be argued that the presence of a large sheet of sky-reflecting water would

⁵⁶² *Ibid*.

⁵⁶¹ *Ibid*.

improve it.'563 As early as 1949, the fauna of the area had been compared to Arthur Conan Doyle's The Lost World and was also described as the "Westminster Abbey of botany." The alternative site the conservationists recommended, further down the valley, would have involved flooding agricultural land and the relocation of villages. C.D. Pigott, in an article in the Journal of *Ecology*, considered how, since the early discoveries in the nineteenth century, sections of Upper Teesdale had been celebrated for 'peculiarity and richness of its flora,' found in few other places in the world and nowhere else in Britain. 565 It was also noted in the New Scientist that the site at Upper Teesdale 'probably contains more rare plants than any other of equal size in Great Britain.'566

Since 1962, the North East had been designated a development area with Teesside developing fast. Furthermore, as the area was so greatly affected by the Depression of the 1930s, the reservoir, increasing industrial production and therefore jobs, was seen by many as anything but negative. As the Stockton Express claimed, most of the criticism of the reservoir came from outside of the area. Yet, it concluded, it was difficult not to feel some sympathy with the conservationists. 'If they lose this one, the foot is through the door, it seems to them, and they will lose the rest. It is, so to speak, the remilitarisation of the Ruhr; and they feel like those who say that if Hitler had been confronted then, there would have been no Second World War. '567

⁵⁶³ Anon, 'Battle of the fells is over', *The Express* (Stockton edition), Friday 27 January

^{1967, 628.1/} L185, DCL. ⁵⁶⁴ See Tinker, 'Cow Green twelve years on', for *Lost World* reference and Anon, 'Battle of the fells is over', The Express (Stockton edition), Friday 27 January 1967, 628.1/ L185, DCL, for "Westminster Abbey" reference.

565 C.D. Pigott, 'The Vegetation of Upper Teesdale in the North Pennines', Journal of

Ecology, 44 (1956), p. 545, A.18229/3 (Botanical Opposition) B1, ICI Papers, TA. ⁵⁶⁶ C.D. Pigott, 'The Botanical Treasures of Upper Teesdale', New Scientist, 21 February

^{1957,} A.18229/2 (Botanical Opposition) B, ICI Papers, TA.

Anon, 'Battle of the fells is over', *The Express* (Stockton edition), Friday 27 January 1967, 628.1/ L185, DCL.

By early 1965, a resistance movement had begun to form to fight the plans. A letter appeared in *The Times* on 4 February, signed by 14 leading botanists, stating their opposition to the site. This letter attracted some public support and on 25 February the Teesdale Defence Committee (TDC) was established. This group produced leaflets encouraging members of the public to lobby their MPs. Local newspapers featured articles discussing the reservoir and its effect on the natural environment of the area. The TDC aimed to build a £5,000 fighting fund, and soon £3,500 had been raised from a sympathetic public. The group also produced 40,000 copies of a leaflet "The Threat to Upper Teesdale." In late 1966, thousands of cars bore little yellow window stickers reading "Save Upper Teesdale.",569 Eventually more than £9,000 had been raised for the TDC.570 Gregory has described Cow Green as an 'international cause célèbre' which gained support not just from various scientific, botanical and natural groups but also from leisure and amenity groups. The area surrounding Cow Green was not only full of botanical wonders; it was also a popular rambling and hiking area.⁵⁷¹ 'Through their multiple and interlocking memberships and affiliations, a small but dedicated group of energetic people ... [created] centres of opposition across a ...range of institutions.'572 There was the understanding amongst opponents that if a reservoir was built at Cow Green, on principle it must be stopped because if it went ahead then 'nowhere else would be safe.'573 Many naturalists saw the future of conservation as being tied to the success or failure at Cow Green. 574

⁵⁶⁸ Gregory, *The Price of Amenity*, pp. 155-157.

Tinker, 'Cow Green twelve years on', New Scientist, 4 May 1978, 628.1/L185, DCL.

Anon, 'Plan for Teesdale reservoir approved', *The Guardian*, 28 May 1968, p. 4. See also David Bellamy, *A Natural Life* (London: Random House, 2011), p. 187.

⁵⁷¹ Gregory, *The Price of Amenity*, p. 158.

⁵⁷² *Ibid*, p. 160.

⁵⁷³ *Ibid*, p. 162.

J.L.F. Parslow (ed.), 'News and Comment: Fight for Upper Teesdale Continues', *British Birds*, 59 (1966), p. 390 – http://www.britishbirds.co.uk/search?model=pdf&id=4005 – accessed electronically 29 August 2013.

Although this reflects a growing concern about the implications of industrial development on the natural world, the battle did not become a catalyst for a wider movement. It did increase popular concern, but after the National Nature Weeks and television programmes such as *Look*, had introduced people to the problems of conservation within their own communities, not just abroad or in the countryside, people began to see things differently. 'It was the principle that mattered' – the principle of conservationists, who have often been seen as something akin to angels (as Rachel Carson was described as the 'nun of nature') versus those who (it seemed) did not care for their surroundings. The conservationists were protecting something which could not protect itself or speak up for itself. 'The point about the Cow Green flora,' botanists claimed, was that it was 'irreplaceable. It can reveal much about the evolution of plant communities, and the plants may have unique genetic feature which modern techniques ... can begin to reveal.'

The debates in the Houses of Parliament concerning the plans were heated. The supporters of the Tees Valley and Cleveland Water Bill were heavily criticised during the third reading in the House of Lords. It was 'one of the most hotly contested and fully investigated Private Bills of recent years. Lord Strang, who had spent 12 years as head of the National Parks Commission, claimed on many occasions that he and his colleagues had battled to protect the countryside. Whilst he supported the bill, he also attacked its supporters, criticising

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⁵⁷⁵ John Davy & Anne Taylor, 'Battle of Cow Green: Is it a botanists' scare or a short-sighted stop-gap?', *The Observer*, Sunday 6 November 1966, p. 5.

The bill passed through Parliament as the Tees Valley and Cleveland Water Bill. It was debated in both Houses of Parliament – see House of Commons Debate, 'Tees Valley and Cleveland Water Bill', 28 July 1966, vol 732 cc1979-2033 –

http://hansard.millbanksystems.com/commons/1966/jul/28/tees-valley-and-cleveland-water-bill-by – accessed electronically 23 July 2013; and House of Lords Debate, 'Tees Valley and Cleveland Water Bill', 23 February 1967, vol 280 cc801-65 –

http://hansard.millbanksystems.com/lords/1967/feb/23/tees-valley-and-cleveland-water-bill#S5LV0280P0 19670223 HOL 15 – accessed electronically 16 April 2013.

Tord Lindgren, House of Lords Debate, 'Tees Valley and Cleveland Water Bill', 23

February 1967, vol 280 cc801-65 –

http://hansard.millbanksystems.com/lords/1967/feb/23/tees-valley-and-cleveland-water-bill#S5LV0280P0_19670223_HOL_12 — accessed electronically 16 April 2013.

their philosophy that nothing should get in the way of progress as flawed. The destruction of the countryside, he said, had begun in the Industrial Revolution and could be blamed on 'greedy capitalists'; now, however in this period of the New Industrial Revolution, it was the government, industry and the trade unions, acting as one in destroying it. Strang stated that the argument of 'industrial necessity may well have validity in the present case ... [and may] be used again and again in later cases, in other circumstances, but with the same overriding force' and it will not halt 'unless someone, somewhere calls a halt.'578 Strang also quoted a *Times* article he had written from 1960, where he made 'reference to these invasions of the countryside.' Describing these 'invasions' as going against the essence of the National Parks Act, government ministers expressed regret at these 'intrusions' into the natural world but claimed that they were national necessities, arguing that the 'intrusions' must be placed somewhere and that there was 'nowhere else to put them.' Strang then described how the National Parks Commission waited for the day the government said 'Thus far and no further.' He explained that this was what the current government was arguing – that it was a national necessity to site a reservoir at Cow Green. 'But let us realise,' Strang concluded as he drew his speech to a close, 'that Cow Green represents the latest invasion of the countryside by large-scale industry, and as such is of ill-omen for the future. 580

⁵⁷⁸ Lord Strang, House of Lords Debate, 'Tees Valley and Cleveland Water Bill', 23 February 1967, vol 280 cc801-65 – http://hansard.millbanksystems.com/lords/1967/feb/23/tees-valley-and-cleveland-water-bill#S5LV0280P0_19670223_HOL_17 – accessed electronically 16 April 2013; see also Anon, 'Cow Green Bill at the final stage', Newspaper article 3 March 1967, DCL, 628.1/L185.

Strang quotes a letter he wrote to the Editor of *The Times* – see Lord Strang, 'In National Parks: Calling an end to depredations', *The Times*, Friday 26 February 1960, p. 13. See also Lord Strang, House of Lords Debate, 'Tees Valley and Cleveland Water Bill', 23 February 1967, vol 280 cc801-65 –

http://hansard.millbanksystems.com/lords/1967/feb/23/tees-valley-and-cleveland-water-bill#S5LV0280P0 19670223 HOL 17 – accessed electronically 16 April 2013.

⁵⁸⁰ Lord Strang, House of Lords Debate, 'Tees Valley and Cleveland Water Bill', 23 February 1967, vol 280 cc801-65 – http://hansard.millbanksystems.com/lords/1967/feb/23/tees-valley-and-cleveland-water-bill#S5LV0280P0_19670223_HOL_17 – accessed electronically 16 April 2013.

The Conservative MP for Gainsborough, Marcus Kimball, proposed a motion to reject the bill, citing the area as one of 'international scientific importance.'581 Every botanist in Britain and Europe, he said, agreed that the plants were rare and that the community of them should be protected. It was also opposed by the Nature Conservancy and the National Parks Commission. 582 Ted Leadbitter, Labour MP for Hartlepool, stated during the debate that anyone 'opposing this bill is not talking sense.' He went on to say that the preservation of human life is far more important than 'scientific interest of other things' although he did not say that 'other things' were unimportant. 584 After the third reading of the bill in the House of Commons in July 1966, virtually all attempts to protest against it petered out, and the House of Commons approved the legislation.

In the House of Commons proof of evidence sessions which pertained to the reservoir plans, notable experts were introduced to discuss the environmental impact of the construction. Stanley Gregory, Senior Lecturer in Geography at the University of Liverpool argued that, despite arguments made to the contrary, a reservoir will not affect the climate of neighbouring areas by the conduction of heat through the ground, only by warming or cooling air as it passes over the land. Any effect on the meteorological conditions of the area would be marginal at best and

⁵⁸¹ Marcus Kimball, House of Commons Debate, 'The Tees Valley and Cleveland Water Bill', 28 July 1966, vol 732 cc1979-2033 -

http://hansard.millbanksystems.com/commons/1966/jul/28/tees-valley-and-cleveland-waterbill-by#S5CV0732P0_19660728_HOC_418 - accessed electronically 16 April 2013; see also Newspaper article, no title, 5 August 1966, DCL, 628.1/L185.

Marcus Kimball, House of Commons Debate, 'The Tees Valley and Cleveland Water Bill', 28 July 1966, vol 732 cc1979-2033 -

http://hansard.millbanksystems.com/commons/1966/jul/28/tees-valley-and-cleveland-waterbill-by#S5CV0732P0 19660728 HOC 418 – accessed electronically 16 April 2013.

583 Ted Leadbitter, House of Commons Debate, 'The Tees Valley and Cleveland Water Bill',

²⁸ July 1966, vol 732 cc1979-2033 -

http://hansard.millbanksystems.com/commons/1966/jul/28/tees-valley-and-cleveland-waterbill-by#S5CV0732P0 19660728 HOC 438 – accessed electronically 16 April 2013.

Ted Leadbitter, House of Commons Debate, 'The Tees Valley and Cleveland Water Bill',

²⁸ July 1966, vol 732 cc1979-2033 -

http://hansard.millbanksystems.com/commons/1966/jul/28/tees-valley-and-cleveland-waterbill-by#S5CV0732P0_19660728_HOC_441 - accessed electronically 16 April 2013.

any influence on atmospheric humidity would be insignificant. Temperature changes as a result of the reservoir would be less than 1°c, claiming 'It seems unlikely that the climate of Widdybank Fell will be altered to any significant extent by the creation of the Cow Green reservoir.'585 This was a view supported by A.S. Thomas, research ecologist and consultant.⁵⁸⁶ Similarly, the head of ICI's research section, James Frederick Newman, commented that a reservoir could be built at Cow Green 'with no more than minor interference with scientific botanical interest or public amenity.'587

Other than these three depositions, however, the ICI papers are noticeably lacking any detailed discussion of the project and the opposition to it; instead, most of the papers are articles about the area from journals, though there is a copy of the TDC's leaflet about why the site was so important to botanists. The lack of detailed commentary from ICI raises a number of questions which remain unanswered – did ICI view the opposition as substantial? Did they perceive any real threat to the plans? How effective were the TDC and others in actually debating the issues? ICI did provide money for botanical and scientific studies to be conducted whilst construction was taking place, though there is no mention in their papers of the reasons why they did this. Was it to placate the protesters, or did they genuinely appreciate the importance of the site and wanted to mitigated the impact of the reservoir as much as possible?

In an editorial in *The Times* on 7 November 1966, the whole issue of Cow Green was laid out for readers to understand, with both sides of the argument

⁵⁸⁵ Proof of Evidence – Stanley Gregory, Senior Lecturer in Geography at the University of Liverpool, House of Commons Session 1965-1966, pp.1-4, A.18229/3 (Botanical Opposition) B1, ICI Papers, TA.

Proof of Evidence – A.S. Thomas, research ecologist and consultant, House of Commons Session 1965-1966, pp. 3-4, A.18229/2 (Botanical Opposition) B, ICI Papers, TA. Proof of Evidence – James Frederick Newman, Head of ICI's research section, House of Commons Session 1965-1966, p. 1, A.18229/2 (Botanical Opposition) B, ICI Papers, TA.

discussed. As this editorial noted, Cow Green was 'an acute form [of] the wider conflict between development and conservation.'588 And it is here, perhaps, that Cow Green has the greatest links to the Conservation Society and the environmental movement of the 1970s. In a section on 'National Policy' in an early draft of the Conservation Society's manifesto, it notes that they wanted some recognition 'of the fact that unspoilt country ... is one of the most valuable national assets.'589 The need to limit economic growth was enmeshed up in the Cow Green issue – industrialists, including trade union representatives, advocated fully for the reservoir to be built. Yet the environmental movement of the 1970s, including the Conservation Society, but also in the political party PEOPLE, and in 'A Blueprint for Society' (Chapter 5), overwhelmingly argued that society can no long solve problems by increasing consumption; instead they all advocated zero growth policies.⁵⁹⁰

Ultimately, the naturalists failed and on 22 March 1967, the Tees Valley and Cleveland Water Bill received royal assent. ⁵⁹¹ Both ICI and the water board said that they would do everything possible during the reservoir construction to make sure that the adjacent areas of interest to naturalists would not be damaged. ⁵⁹² ICI promised £100,000 to fund scientific research in the area for ten years during the construction of the reservoir. By 1969 half the amount had been allocated and 28 research projects had been authorised, covering geological, botanical, climatological studies as well as research into the flora and fauna of the area. Scientists at the site discovered new insects and worm species that were previously not recorded in Britain, as well as plants not known to live in Britain.

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⁵⁸⁸ Anon, 'Watering the Plant', *The Times*, Monday 7 November 1966, p. 11.

The Conservation Society – Suggested Programme, p. 1, MD8037 Acc. 1999/63, The Conservation Society, SCA.

⁵⁹⁰ See Anon, 'Unions back £2½M. Water Scheme', *The Times*, Saturday 4 September 1965, p. 4; Anon, 'Union support for reservoir', *The Times*, Friday 4 November 1966, p. 12. ⁵⁹¹ Gregorv. *The Prince of Amenity*, p. 202.

⁵⁹² Anon, 'Plan for Teesdale reservoir approved', p. 4.

The area was also discovered to have significant mole life, which is rare, as moles do not usually live above 1,600 feet in huge numbers.⁵⁹³

Cow Green is a useful case study to include in this thesis because it featured a campaign to protect the environment yet the main organisation involved, the TDC, failed in its task of preventing the construction of the reservoir. The factors described in Chapter 1 which affects the success or failure of a group can be applied to the TDC. 594 Technical arguments were used by the TDC to argue that the area was of scientific importance. Yet they also failed to gain support of a majority of MPs. Some, whilst sympathetic, felt that the boost to the local economy which construction of the reservoir would provide was too great an opportunity to miss. Also noted in Chapter 1 is that if groups expand the scope of the term 'environment,' then they are more likely to be successful. 595 TDC did not do this; whilst drawing support from amenity and leisure groups as well as natural history and conservation groups, they did not articulate an argument which included other issues. Indeed supporters of the plans often framed the argument in economic terms – either strengthen the local economy through building the reservoir or weaken it and (potentially) reduce the number of jobs available by not constructing it. When faced with this stark choice it was harder for the campaigners to gain support. In the earlier clean air campaign the National Smoke Abatement Society deliberately appealed for support arguing that clean air would be value for money and healthier for people as well as better for the environment.

Although the TDC used the resources it had available, these were not sufficient – nor were its arguments strong enough – to encourage the authorities to

⁵⁹⁵ *Ibid*, pp. 214-217.

⁵⁹³ Anon, 'Botanists have to meet a deadline in the Upper Teesdale', *Teesdale Mercury*, Wednesday 12 November 1969, 628.1/L185, DCL.

⁵⁹⁴ Kimber & Richardson, 'Conclusion: tactics and strategies', pp. 212-218.

site the reservoir elsewhere. Nor was the political environment such that made the alternative proposal any more appealing – the desire for jobs in the Teesside area overrode any environmental concerns, something which the TDC did not fully take up in their arguments. Moreover plans to site the reservoir elsewhere in the area would have encroached onto farmland, which alienated farmers against the naturalists' plan. Agricultural interests became the swing factor in this battle, and one which might even have decided the outcome. The TDC did exploit the media to their advantage and the campaign gained some international coverage. One reason the campaign ultimately failed, however, was perhaps because of the nature of the fight itself – conservation versus industrialisation. Or, to put it another way, plants versus jobs. As Robert James Berry notes, the Cow Green battle shows how difficult it is to argue on purely aesthetic or environmental lines about protecting the natural world; it is much better to link to economic or other issues.

In terms of the effectiveness of this campaign, it failed because it did not achieve what it set out to do. Charles Tilly has argued that a campaign is effective if it accomplishes what it set out to achieve, regardless of the costs involved. ⁵⁹⁹ Yet the campaign was effective if considered in the wider scope which this thesis discusses – that of the growth of an environmental consciousness. And the terms 'success' and 'failure,' 'effective' and 'ineffective' are relative. The campaign was not successful in its aim of stopping the construction of the reservoir. But it was successful in a wider aim of educating and informing the public about

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⁵⁹⁶ John E. Frost, 'Case Study on Cow Green Controversy', *Proceedings of the Symposium on Social and Economic Aspects of Water Resources Development*, 9 (1971), p. 97.

⁵⁹⁷ It was mentioned in *The New York Times*. See W. Granger Blair, 'Conservation Forces Lose Fight over Reservoir in Lords Debate: Big-business and Unionist Peers join in support of Imperial Chemical Plant', *The New York Times*, 9 November 1966, p. 10.

⁵⁹⁸ Robert James Berry, *God's Book of Works: The Theology of Nature and Natural Theology* (London: T&T Clark Ltd, 2003), p. 148.

Tilly, From Mobilisation to Revolution, p. 116.

environmental issues. It was 'effective' in this. By working with the amenity and leisure groups, it helped get its arguments across to a wider audience. On its own it did not necessarily cause a radical change in the environmental consciousness of the nation. People were already becoming increasingly aware of environmental issues, and Cow Green just provided another example they could use. But when viewed alongside the *Torrey Canyon* disaster, another example of the impact of industrialisation of the natural world, the campaign's significance increases. The Conservation Society was formed during the latter stages of the battle and was also influenced by the *Torrey Canyon*. There was no national organisation which could take up the issues raised by Cow Green or the oil spill, although the Conservation Society did when it was launched. In addition, Cow Green influenced Don Kent, who played a significant part in SOC'EM in the 1970s and it directly affected his life choices through inspiring him to read environmental studies at university. 600 Eric Ashby notes that the importance of the battle was not the outcome; it was that the battle happened at all. In gaining 'massive public support,' Ashby quotes one politician who said of the battle it was "a head-on clash between the quantifiable and the unquantifiable." 601

To say that the naturalists who fought in the battle of Cow Green had failed would not be incorrect. They did fail to prevent the construction of the reservoir, but they also placed in people's consciousness the image of a David and Goliath fight over the natural world. It was recognised that it was no longer enough to warn people about the damage they were doing to the environment. Instead those naturalists sought to try and put out positive messages about conservation issues. There was some debate amongst conservationists about whether they should

⁶⁰⁰ Interview with Don Kent, 10 April 2012.

The politician is quoted in Eric Ashby, *Reconciling Man with the Environment* (Stanford, California: Stanford University Press, 1978), pp. 8-10, quote appears on p. 10.

retain an academic approach to their opposition, or whether they should take to the streets.⁶⁰² This debate reflects new issues which became prevalent in the 1970s.

The TDC was a promotional pressure group which sought to inform the public about the issue of conservation in this very specific area of the Pennines. In that way, therefore, with a pressure group and a drive to inform the public, the Cow Green campaign can be considered as part of the wider nature conservation campaign of the 1940s, 1950s and 1960s (Chapters 2 and 3), and, more significantly, it did influence environmentalism in the 1970s. Its ideas highlighted a concern about the price of industrialisation on the environment, which was seen with the *Torrey Canyon* and later in the early 1970s with programmes like *Doomwatch*. It can also be seen in the books *Limits to Growth* and 'A Blueprint for Survival' from the early 1970s (Chapter 5). These two works argued for low growth strategies to be adopted and that the industrial-economic system should change.

Cow Green was a clash between conservationists and industrialists where the industrialists won. It is an example of the emergence of more environmentalist arguments, adopted by opponents of the reservoir, yet the complex broad networks which denote the environmental movement did not exist. Whilst the TDC was a single-issue group in a similar way to the National Smoke Abatement Society and other reactive pressure groups of the post-war period, the arguments it made against the reservoir were more environmentalist than had previously been seen, adopting a more bio-centric approach. It also educated the public further about conservation issues and raised important questions as to whether the environment should be protected for its own sake or whether industrial growth should take precedence. These ideas resurfaced in 1967 when concerns about

⁶⁰² Sheail, Seventy-five years in Ecology, p. 231.

the effects of industrial development on the environment were seen most clearly with the sinking of the oil tanker, the *Torrey Canyon*.

The Torrey Canyon Disaster

During the Easter holidays in 1967, an otherwise quiet news period was dominated by images of British beaches strewn with oil. With live news reports from the scene of the disaster, television news audiences felt a sense of immediacy that newspapers could not portray. The front pages of newspapers were covered with stories about the oil and television news bulletins shocked the public. The oil had come from the stricken oil tanker the *Torrey Canyon* which ran aground off the Cornish coast that March. This spill 'changed the landscape of conservation in Britain' with the disaster 'enduring the collective memory' of the nation. The disaster awakened the public to the hazards of oil tankers. But it also did more than this. In the minds of tens of millions of people in Europe and the Western Hemisphere, if not beyond, the *Torrey Canyon* produced awareness, however vague or technically uniformed, where there had been unawareness.

Whilst the disaster was 'a symbolic landmark event of the UK environmental discourse' the historiography of the disaster is somewhat patchy. 606 Most of the literature which deals with the disaster has focused on a scientific analysis of the spill, although some has discussed the human side of the disaster. John Sheail has described the political dimension of the spill; Edward Cowan covered the events for *The New York Times* and subsequently wrote a book about his

603 Sheail, '*Torrey Canyon*: The Political Dimension', p. 486.

Jameson, *Silent Spring Revisited*, p. 47. 605 Cowan, *Oil and Water*, p. 229.

⁶⁰⁶ Phil MacNaghten & John Urry, *Contested Natures* (London: Sage Publications Ltd, 1998), p. 49.

experiences; American author Richard Petrow also wrote about the spill.⁶⁰⁷ Yet many of those who write about 1970s Britain fail to include this important disaster in their analysis, despite the legacy and its importance in the environmental discourse of the period.⁶⁰⁸

Industrial accidents were nothing new, but the *Torrey Canyon* disaster introduced a new element, that of sustained and widespread damage to the natural world. It emphasised the 'vulnerability of ecosystems' to contamination 'by the forces of supposed progress.' By 1970 five gallons of oil for every person on the planet was being transported by sea. Tankers had grown in size since 1945 to accommodate the increase in demand in the post-war period. This meant that any disaster which did occur would have catastrophic consequences and that it was only a matter of time before an accident happened. 610

The disaster, the so-called 'Battle of the Holiday Coast,' 'helped raise awareness of pollution.' So much so that, by 1970, as the Natural Environmental Research Council noted, there was a 'growing public apprehension of the impact that modern society is having on the natural environment,' from

⁶⁰⁷ For more on Richard Petrow see – http://library.syr.edu/digital/guides/p/petrow_r.htm – accessed electronically 28 August 2013. See also Petrow, *The Black Tide*; Sheail, '*Torrey Canyon*: The Political Dimension'; Cowan, *Oil and Water*.

Canyon: The Political Dimension'; Cowan, *Oil and Water*.

608 This may be because environmental history is in its infancy in Britain and as such there is little analysis of the environmental in post-war British history. Until recently, as Stephen Mosley and Geneviève Massard-Guilbaud argue, social history has ignored environmental issues – see Geneviève Massard-Guilbaud & Stephen Mosley, 'Breaking Down Borders: Integrating the Social and Environmental in History', in *Common Ground: Integrating the Social and Environmental in History*, edited by Geneviève Massard-Guilbaud & Stephen Mosley (Newcastle upon Tyne: Cambridge Scholars, 2011), pp.4-5. In addition, the lack of studies marrying together environmental issues further touches on this as this disaster has not necessarily been viewed in a context of the 1970s.

⁶⁰⁹ MacNaughten & Urry, Contested Natures, p. 49.

Figures are discussed in McNeill, *Something New Under the Sun*, pp. 304-306.

Patrick Barkham, 'Oil spills: legacy of the *Torrey Canyon*', *The Guardian*, 24 June 2010,

G2 Section, p. 4 – http://www.guardian.co.uk/environment/2010/jun/24/torrey-canyon-oil-spill-deepwater-bp – accessed electronically 9 October 2012; the disaster was called the 'Battle of the Holiday Coast' in Kenelm Jenour & Edward Vale, 'Army alert as first oil patch hits shore: Battle of the Holiday Coast is on today', *Daily Mirror*, Saturday 25 March 1967, p. 1.

issues like Cow Green and the Torrey Canyon oil spill. 612 It is for this reason that it features in this study – more than any other event in the later 1960s, the *Torrey* Canyon informed the public of the problems of pollution. It also fed into the change in ideas about ecosystems and the environment which was prevalent in the 1970s and which dominates the movement today. In this way, it followed ideas which surfaced at Cow Green and inspired the Conservation Society to critique the whole framework of society, not just environmental problems.

As seen in Chapter 3, some awareness of this type of oil pollution was known before 1967. In 1955, for instance, concerns were being expressed about pollution caused by the cleaning of tankers. A pamphlet, 'How can we bathe our fish in this?' describes the problems of this. The pamphlet, stored amongst the papers of Sir Peter Scott, was dated 12 years earlier than the *Torrey Canyon* disaster and provides evidence of an emerging environmental awareness of oil pollution in the 1950s. Although not directly connected to oil spills, it nevertheless warned of oil hitting the coastline. It advocated activism, describing what the reader can do to limit the discharge. They should record all the oil pollution they witness, report it to local councils or to newspapers, 'and so awaken public opinion about this menace to holidays and birdlife.'613 The reader is informed they could also support their National Committee on Oil Pollution and press the nations that attended a Conference on this issue should hold them to account. 614 And, as Commandant L. Oudet has claimed:

Oil pollution at sea was already a well-known problem in 1967 and there were international conventions which attempted to reduce its extent, but these conventions were intended to prevent pollution by takers cleaning their holds before taking on fresh cargoes. The black tide from the *Torrey Canyon*

⁶¹² The Natural Environment Research Council Annual Report, 1970, p. 2, FT6/15, TNA.

⁶¹³ Pamphlet, 'How can we bathe our fish in this?' in folder C.1446, Papers of Sir Peter Scott, GB0012, CUL.

showed another involuntary kind of pollution which had never before occurred on such a scale; it was not a question of preventing its occurrence, because it had already taken place, but of containing it and suppressing it. The problem had never been fully studied and the scale on which it suddenly presented itself showed how inadequate were the measures improvised for its solution.⁶¹⁵

In November 1960, the Nature Conservancy provided information to politicians 'pointing out that the immense expansion of oil traffic in British waters has created what amounts to a major new hazard. About 500,000 tons of oil was released into the seas and oceans of the world through the discharge method each year; about one-fifth of which was released near British waters. As the number and size of tankers increased, so did the levels of discharge. As noted in the World Wildlife Fund pamphlet Save the World's Wildlife, oil pollution and its effects on wildlife were already a serious concern for some groups before this disaster (Chapter 3). In 1952, the Minister of Transport had established a committee to consider the problem. Its report – Prevention of Pollution of the Sea by Oil – suggested that discharging waste oil at sea should be prevented or reduced and done in as large an area as possible in order for the impact to be minimal. In 1962, the Inter-Governmental Maritime Consultative Organisation claimed that removing the oil residues was only permitted at ports, and limits were also made to limit the amount of oil discharged at sea. 617 Just as with air pollution, which had been known about since the Industrial Revolution, it was only after the smog disaster that the government were forced to act. Here too with oil pollution it was only after the oil tanker sank that widespread concern was generated about oil pollution together with wider criticism of industrial development and its impact on the environment.

⁶¹⁵ Commandant L. Oudet, *In the wake of the Torrey Canyon: Reflections on a disaster* (London: The Royal Institute of Navigation, 1972), p. 64.

The Nature Conservancy Annual Report, 1961, p. 43, FT6/11, TNA.

Pamphlet, 'The *Torrey Canyon*: Report of the Committee of Scientists on the Scientific Technological Aspects of the Torrey Canyon Disaster' (London: Her Majesty's Stationary Office, 1967), p. 1, in Marine Oil Pollution Incidents: Torrey Canyon, March 1967, FT48/29, TNA, p. 1.

Both issues are largely absent from the historiography of 1970s environmentalism in Britain yet both were very clear environmental disasters which triggered environmental responses to them. Both disasters also reveal something of the nature of the development of environmental awareness in this period. There were peaks and troughs in environmental awareness, both from near continuous nature conservation television programmes and organisations such as the Council for Nature and WWF working to inform the public of environmental issues, to one-off events, such as large scale disasters, which provided people with examples of how the environment was being destroyed. Whilst awareness developed over time, and these large events were important but often isolated incidents, they did help enhance a public consciousness.

In Parliament there had been some discussion about oil pollution pre-1967 and two Acts – Oil in Navigable Waters Acts of 1955 and 1963 were already in place. Even then, the effects of oil pollution on wildlife had been discussed, with some members recognising that oil discharge might contaminate 'shell fish beds' as well as 'plankton and other organisms on which fish feed.'

A pamphlet, released by the British government in the wake of the *Torrey*Canyon disaster, further highlighted the history of pollution by tankers discharging their tanks at sea:

The problem has long been recognised, and methods have been developed in Government laboratories for disposing of oil on the sea surface and for dealing with pollution of foreshores. Hitherto most of the oil has come from illegal tank washings at sea, and tanker accidents have not been a significant factor. ⁶¹⁹

http://hansard.millbanksystems.com/lords/1954/dec/14/oil-in-navigable-waters-bill-bit/551 \/ 0.100000 1054/1214 HOL 17 accessed electropically 28 October 2013

⁶¹⁸ *Ibid*; see also Earl of Selkirk, House of Lords Debate, 'Oil in Navigable Waters Bill', 14 December 1954, vol 190 cc330-51 –

hl#S5LV0190P0 19541214 HOL 17 – accessed electronically 28 October 2013.

619 Pamphlet, 'The *Torrey Canyon*: Report of the Committee of Scientists on the Scientific Technological Aspects of the *Torrey Canyon* Disaster' (London: Her Majesty's Stationary

How the Torrey Canyon disaster was different, however, was that it demonstrated 'that the trend towards fewer but larger tankers may have increased the risk of serious pollution from accidents in the busy lanes around our coasts.'620

Much of this pamphlet had an environmental tone to it. Wildlife protection, for instance, was the main priority during the first few days of the spill as was the protection of fisheries, an important local industry. 621 When pollution is discussed in the pamphlet, it is explained that measures to prevent the oil from contaminating areas included descriptions of wildlife most at risk in these areas. This report acknowledged the problems of the detergent but also, importantly recognised this as an environmental disaster affecting many different aspects of the natural world.

It is, perhaps, somewhat ironic that in February 1967, just over a month before the Torrey Canyon disaster, a debate in the House of Commons discussed the pollution of beaches by oil. 'The most unpleasant factor' of oil pollution, noted W. H. Loveys, MP for Chichester, was:

Undoubtedly the terrible suffering inflicted on birds. There has been a tremendously wide Press coverage lately by such diverse publications as The Times, Sunday Times, Daily Express, Daily Mirror and the Sun and many local newspapers which have the problem on their doorstep. ... On 24th January The Times had an article which rightly referred to "a southern massacre." It had made a survey of a five-mile stretch around Selsey Bill. The article stated: "It is impossible to know the real toll but about 5,000 birds died recently from oil in the Medway". It is certainly true that on some of the beaches in my constituency hundreds of birds, dead and dying, have been picked up. The birds take from two days to three weeks to die in great pain. The diver varieties suffer the worst. They dive down through the oil and up through it. It gets in their lungs and they suffer great pain. The birds which float on the oil suffer later when they try to clean themselves and get the tar inside them. The R.S.P.C.A. does a wonderful job in cleaning the birds, but it

Office, 1967), p. vi, in Marine Oil Pollution Incidents: Torrey Canyon, March 1967, FT48/29,

TNA.

⁶²⁰ *Ibid.* 621 *Ibid.*

finds it impossible to clean them without removing some of the natural oils on which the birds rely for protection. 622

This is important for several reasons. It is clear that many people, both in government and outside, were familiar with the effects of oil pollution and 'the destruction of wild life.'623 What is striking, however, is how close the descriptions of the damage to which Loveys referred to were what happened during the *Torrey Canyon* accident. As the pamphlet produced by the government in the wake of the disaster claimed, what made this disaster all the worse was that the '*Torrey Canyon* disaster has put the problem [of oil pollution] into a completely different perspective. It has revealed the enormous scale of the threat posed by the risk of accidents, especially to larger tankers.'624

Nothing could prepare authorities for what happened on that fateful morning of Saturday 18 March 1967. The oil which covered many thousands of birds and many miles of Cornwall's beaches in March 1967 was not merely the result of oil discharge; rather it came from one single tanker and it was not just residual oil, it was the entire volume that the tanker was carrying. It was the vastness, and the indiscriminateness of the disaster which was so shocking. The fact that the disaster played out on television sets across the country made it all the more urgent and catastrophic. BBC footage from their Plymouth studios of the disaster was seen in 70 different countries. Bulldozers were employed on the beaches along the Cornish Riviera 'in a desperate bid to rid them of oil.' In Bournemouth, all

⁶²² W.H. Loveys, House of Commons Debate, 'Beaches (Oil Pollution)', 6 February 1967, vol 740 cc1070-80 – http://hansard.millbanksystems.com/commons/1967/feb/06/beaches-oil-pollution#S5CV0740P0 19670206 HOC 140 – accessed electronically 28 October 2013. 523 James Callaghan mentioned oil pollution and the 'destruction of wild life' in House of Commons Debate, 'Oil in Navigable Waters Bill [Lords]', 21 March 1955, vol 538 cc1745-805 – http://hansard.millbanksystems.com/commons/1955/mar/21/oil-in-navigable-waters-bill-lords#S5CV0538P0 19550321 HOC 223 – accessed electronically 28 October 2013. 524 Pamphlet, 'The *Torrey Canyon*', p. 3, FT48/29, TNA.

The disaster was unprecedented – see The 'Torrey Canyon', Home Office Report (Cmnd. 3246), p. 3.

⁶²⁶ BBC Accounts and Annual Report, 1966-1967 (Cmnd. 3425), p. 51.

traffic was banned from the prom and the streets were lined with sand in the hope that that this would stem the tide of any advancing oil. 627 Local authorities from Kent to Somerset also established action plans in bids to save the beaches and Hampshire County Council cordoned off part of the Solent with a mile-long boom from the Isle of Wight to the mainland. 628 Peter Scott broadcast a television appeal on behalf of the WWF and other groups to 'Save the Sea-birds.' This raised £25,428, revealing how effective television was in informing people about the disaster. 629

It seemed that the *Torrey Canyon* had opened a flood gate and disasters seemed to follow one after another. A direct comparison can be made between the *Torrey Canyon* and the recent Deepwater Horizon oil spill in the Gulf of Mexico in 2010. At the time *The Guardian* also made connections between the two. It noted that in 1967, the *Torrey Canyon* 'was the biggest oil spill ever, and the first involving a new generation of super tankers. Looking back, the echoes of the BP disaster unfolding in the Gulf of Mexico are loud and eerie. Both disasters hit tourist destination and both involved the oil company BP. Inertia and dithering were worsened by the buck-passing of multinational companies implicated in the mess. And no one knew what to do. Whilst *The Guardian* was referring to the *Torrey Canyon* in that quote, it could just as easily be describing Deepwater Horizon. However, the *Torrey Canyon* 'is not just a history lesson; it is living proof that big oil spills plague ecosystems for decades. Forty-three years on, the crude from the *Torrey Canyon* was still killing wildlife on a daily basis. On the

⁶²⁷ Anon, 'The Bomber's Eye View', *Daily Mirror*, Wednesday 29 March 1967, pp. 12-13.

Anon, "Rope off the Solent" Plan to Stop Oil', *Daily Express*, Wednesday 29 March

⁶²⁹ Ibid. See also BBC Accounts and Annual Report, 1966-1967 (Cmnd. 3425), p. 45.

⁶³⁰ MacNaughten & Urry, Contested Natures, pp. 49-50.

⁶³¹ Barkham, 'Oil spills: legacy of the *Torrey Canyon*', p. 4.

⁶³² *Ibid*.

⁶³³ *Ibid*.

Guernsey coast, after the removal of a large amount of oil covering the beaches, it was eventually deposited in a quarry, the so-called 'Torrey Canyon quarry' where it remained as of 2010.634

Whilst the disaster informed the public, no pressure group emerged as a result of the spill. That is not to say that there was no local activism however. When the oil hit the Cornish beaches, volunteers, many of whom were on their Easter holidays eagerly sought to help. There was 'the now famed Easter Monday scene on Marazion beach when old people and children turned out with watering cans, jugs, buckets and spades to help with the clean-up. Farmers helped by using their rear-mounted tractor crop sprayers to spray the lagged beaches.'635 Women and children joined the clean-up. That Monday was washday for many housewives, armed with a cleaning arsenal of soap and sponges, and even holidaymakers volunteered in what locals saw as an almost impossible task of cleaning Cornwall's beaches. 636

An appeal was made for rags for cleaning and children went out and collected them. Cars toured the area with loudspeakers calling out for people to go and save their local beaches and over 100 locals turned up. 637 Bv the afternoon of the Monday, volunteers were 'sprinkling detergent with watering cans and district officials were using knapsack sprayers.⁶³⁸ It did not help matters that on that day there was the highest spring tide for years, meaning all the cleaning efforts were undone as the high tide brought more oil onto the Cornish beaches. The Newquay Urban District Council 'mobilised a four-wheel-drive fertiliser sprayer, twelve crop

⁶³⁴ *Ibid*.

Anon, 'Torrey Canyon bombed and napalmed', The West Briton, Thursday, 1 May 1967.

Anon, "Washday" on the shore', *Daily Mirror*, Tuesday 28 March 1967, p. 1.

⁶³⁷ Anon, 'On beaches & on sea, West Cornwall goes into action against wrecked *Torrey* Canvon's oil'. The Cornishman. Thursday 30 March 1967, p. 4 (the information here. appears under the subheadings, 'Women & children at Marazion', & 'Liberation', in the column next to it).
638 Cowan, Oil and Water, p. 127.

sprayers, thirty hand sprayers, stirrup pumps, three hundred barrels of detergent, tractors, a wrecker, twelve boats, thirty-five petrol-driven pumps and a crane. A voice radio communications control point and network were established. One engineer or technical officer was put in charge of each beach and one in command of sea operations.'639

Edward Cowan acknowledges the role of volunteers. There were thousands of troops – who had had their leave cancelled – on the Cornish beaches who got some help from volunteers, he states, but these volunteers soon had to return to their normal occupations:

Members of the Women's Volunteer Service, however, supported the troops week in and week out. The women trudged through the sand and brown sludge with broth, coffee, tea and sandwiches prepared in their own kitchens. Sometimes these housewives drove 20 or 30 miles from home, searching for "their" troops, who had moved to a new trouble spot. Mrs Margaret Richmond-Jones told a reporter for *The West Briton*, "It is a very nasty job and is sometimes quite dangerous. The detergent is unpleasant, the oil is unpleasant and the weather has been perishing clod. Taking hot soup and sandwiches often means climbing down steep cliffs along difficult paths". 640

Groups such as the Cornish Naturalist Trust saw their membership massively increase, with people coming to Cornwall to help with the spill from all over the country. Mousehole Bird Hospital overflowed with the numbers of birds being admitted, and the Naturalist Trust, in cooperation with the Cornish Bird-Watching and Preservation Society also established a number of other centres to assist the volunteers. An Oil Pollution Action Committee was set up, creating a reserve army to help clean up local beaches, armed with stirrup pumps. Plastic hosing was also placed along the bed of the river Helford in the hope of saving the

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⁶³⁹ *Ibid*, pp. 128,130.

⁶⁴⁰ *Ibid*, p. 136. See also Arthur Smith, Barry Stanley, Edward Vale & Kenelm Jenour, 'Vast oil threat to the South: Now the sea comes in for the kill', *Daily Mirror*, Tuesday 28 March 1967, pp. 1, 24

⁶⁴¹ Anon, 'Societies Combine to Help Birds', *The Cornishman*, Thursday 6 April 1967, p. 9. ⁶⁴² *Ibid*, & Anon, 'Marazion Wants Anti-Oil Army', *The Cornishman*, Thursday 6 April 1967, p. 9.

oysters that lay within estates owned by the Duchy of Cornwall. The idea was that the hosing, perforated with small holes would have compressed air blown through it, should oil enter the river, creating an upward current and protecting the oyster beds. 643 The Nature Conservancy provided a list of areas important for wildlife where booms could be placed.⁶⁴⁴ Booms were used 'as a means of corralling oil, and also of preventing oil from entering harbours and inlets, especially where there was risk to shellfish beds, areas of biological importance' or other wildlife. 645

The toxic slick also reached the Brittany coast where Operation Orsec was put into place. This gave the French authorities the power to draft any worker in the region to the beaches to help the clean-up operation. Sawdust was dropped on the sea in the hope of it absorbing some of the oil and therefore mitigating the effects on the French coast. 646 In Britain, 'Operation Mop Up' experimented with straw as a new method of dealing with the oil. Tests showed that when straw was added to an oil layer on water, it collected many times its own weight in oil, 'giving an agglomerated mass that can for example be handled by pitchforks,' making it easier, potentially, to clean up. 647

Richard Petrow has argued that what happened to the birds as a result of the oil spill 'broke the heart of Britain.' 648 Children, especially, were affected. In Perranporth, children from the local area patrolled a stretch of beach three and a half miles long, up to three times a day, collecting birds and leaving them in a

⁶⁴³ Edward Cowan, 'Oystermen try to fend off oil', *The New York Times*, 30 March 1967, p.

<sup>21.
644</sup> House of Commons Debate, 'Wild Life (Oil Pollution Rooms)', 14 April 1967, vol 744 cc258-9w - http://hansard.millbanksystems.com/written_answers/1967/apr/14/wild-life-oilpollution-rooms – accessed electronically 26 October 2013.

645 Pamphlet, 'The *Torrey Canyon*: Report of the Committee of Scientists on the Scientific

Technological Aspects of the *Torrey Canyon* Disaster', p. vii, FT48/29, TNA.

⁶⁴⁶ Anon, 'Catastrophe plan ordered to battle oil: Slick washes ashore on French coast', Chicago Tribune, 11 April 1967, p. 18.

H.A.C. McKay. Oil Pollution at Sea: Studies in Connection with the Torrey Canyon Episode (Chemical Division, Atomic Energy Research Establishment, Berkshire: UK Atomic Energy Authority Group Report, 1967), p. 4. 648 Petrow, *The Black Tide*, p. 135.

central location, from where they were then collected by the RSPCA and taken to Mousehole hospital for cleaning. 649 A young female volunteer worked all day and when finally asked to leave, burst into tears. This was also seen in London in the early 1970s. In December 1971, the activist group Commitment were protesting in London and carried balloons filled with 'fresh country air' to their protest. In this protest, the police popped these 'fresh air' balloons, which also caused many children to burst into tears, as they had done seeing the birds die from the oil. 650 Children helped in the clean-up in what was claimed to be a "modern children's crusade." 651 Many children spent long hours on the beaches, desperately looking for and helping stricken birds.⁶⁵²

The real victim of the disaster was the wildlife. 'Lobsters and crabs in the path of the oil and detergent were found to have a slight kerosene taste.'653 At the time there were fears that the Cornish coastline would be irreparably damaged and concern existed about the longer term effects on the natural world. 654 'Birds and beaches coated with tarry oil made for great television,' David Peterson del Mar had suggested, 'as millions of viewers across the globe watched innocent animals suffering and dying because of human folly. [Rachel] Carson's prophesies were bearing putrid fruit in the western world's living rooms. 655

⁶⁴⁹ *Ibid*, p. 127.

⁶⁵⁰ Email correspondence with Brian Milton (March-May 2012); Interview with Victor Anderson, 3 May 2012.

Antony Lewis, Cowan's colleague at The New York Times used the term "modern children's crusade" quoted in Cowan, Oil and Water, p. 127. See also H.A.C. McKay (ed.), Oil Pollution at Sea: Studies in Connection with the Torrey Canyon Episode (Berkshire: UK Atomic Energy Authority Research Group Report - Chemistry Division, Atomic Energy Research Establishment, 1967). ⁶⁵² Petrow, *The Black Tide*, p. 127.

Anon, 'Tanker wreck aftermath minor', *The Washington Post*, 20 February 1968, p. B7. Peter Waverly, 'Victim of first tanker disaster was our wildlife', The West Briton, Thursday 1 May 1997.

⁶⁵⁴ Douglas Williams, 'Environmental holocaust that hit Penwith 30 years ago', The Cornishman, Thursday 20 March 1997, p. 31; Anon, 'Damage is lasting in ocean oil spills', The Washington Post, 12 December 1970, p. A15. 655 Peterson del Mar, Environmentalism, p. 103.

Furthermore, as Britain and Ireland provide some of the most important breeding ground for seabirds in the North Atlantic, the *Torrey Canyon* disaster had an ever more significant effect on birds. As a report from the International Council for Bird Preservation underlines, the images of these birds created a wave of sympathy from across the country with people travelling to the area to help. A huge operation 'of "washing" birds' was launched. This image 'was ineradicably impressed on the public mind,' with "cleansing stations" of all sorts' being created when many birds 'died quickly' so that the 'survival rate by the end of the year was less than one per cent."

The oil from the tanker also caused 'widespread damage to intertidal marine plant and animal life,' as well as affecting a large number of birds 'over a wide area. The damage to ... plant and animal life was aggravated by the use of detergents. Back shore dune and cliff plants suffered from bulldozing and trampling by decontamination workers and from the spillage of detergent.'658 Detergent was used to clean the beaches of oil break up the oil at sea when it came ashore (Harold Wilson suggested changing the name to 'emulsifier' when it was realised the detergent was damaging the environment). 659 But this detergent produced a 'double poison' with the oil and led to 30 species of marine life being killed off. Once the detergent mixed with the oil, it sank to the bottom of the sea with the result that fish and other marine life absorbed it. 660

Scientists were concerned about the detergent and its effects on fish stocks. They estimated that a concentration of one part in a million of toxins from

⁶⁵⁶ Royal Commission on Environmental Pollution: Enquiry into Oil Pollution of the Marine Environment, 4 December 1979, p. 2, The Nature Conservancy, FT8/9, TNA.

⁶⁵⁷ Part of the International Council for Bird Preservation Annual Report, 1967, 'Oil Pollution of the Sea', p. 22, FT48/29, TNA.

⁶⁵⁸ Pamphlet, 'The *Torrey Canyon*', p. 39, FT48/29, TNA.

⁶⁵⁹ Anon, 'Voice of calm in troubled waters', *The Times*, 2 January 1998, p. 8.

⁶⁶⁰ Anon, 'Detergent's used in tanker case killed many fish', *The Washington Post*, 4 May 1967, p. G9; MacNaughten & Urry, *Contested Natures*, p. 49.

the detergents would destroy some particular 'species' such as microorganisms which provide food for many other species. 661 This mirrored the arguments Carson made about pesticides being absorbed by plants and then entering the food chain, eventually resulting in humans absorbing it into our fatty tissue. It was noted that 'what was bad for one species would be bad for many others.'662 This was a more bio-centric, environmentalist attitude, focusing on ecosystems, indicative of the prevailing ideas at the time. When 250 tons of oil was spilt off the coast of Milford Haven in July 1960, a study by scientists resulted in the destruction of about 30 per cent of the fauna present. 'The limited experience from Milford Haven indicates that oil could still come ashore more than a year after cleaning. 663 What was worse was that the oil polluting Cornwall was far more widespread than at Milford Haven. Oil on the surface of the sea deprives organisms below the surface of oxygen. 'Toxic substances from detergent would [also] kill sea life by destroying cell walls.'664 Several different types of fish were also affected – bottom fish which included pollock, cod and plaice; midwater fish such as mackerel and pilchard; crustacean shellfish including lobsters and crabs; and molluscan shellfish for instance oysters, mussels and scallops. 665

An editorial in *The Times* on the day after Easter Monday highlighted the effect of the disaster on the environment. It is our beaches that are 'already being fouled ... [our] marine and bird life [that] is locally endangered, and [we] who may be required to pay the cost of cleaning up the mess.'666 Had there been better environmental protection, claimed the article, the English coast and the Channel

⁶⁶¹ Anon, 'Detergent could destroy fish stocks', *The Times*, Tuesday 28 March 1967, p. 8.

⁶⁶² *Ibid*.

⁶⁶³ *Ibid*.

lbid; see also Roy Jenkins, House of Commons Debate, 'Torrey Canyon', 10 April 1967, vol 774 cc758-821 – http://hansard.millbanksystems.com/commons/1967/apr/10/torrey-canyon#S5CV0744P0 19670410 HOC 423 – accessed electronically 26 October 2013.
 Pamphlet, 'The *Torrey Canyon*', pp. 36-37, FT48/29, TNA.

⁶⁶⁶ Anon, 'The *Torrey Canyon* Case', *The Times*, Tuesday 28 March 1967, p. 9.

would have been saved 'from a noisome pollution.' It even revealed a growing concern with technological advancement. 'Intensified technology throws up the risk of accidental disaster on a huge scale, for which, because of the pace of innovation,' it only makes things worse. 667

There were few protocols in place to deal with anything of the magnitude of the scale of a disaster like the *Torrey Canyon*. 668 The sinking of the *Torrey Canyon* attracted international coverage particularly in the United States, as the ship was owned by American company Union Oil. As a result, prominent American newspapers such as The New York Times, The Washington Post, The Boston Globe and The Chicago Tribune all featured articles about the oil spill. The disaster even resulted in a call for help in the United States from the Chairman of the Audubon Naturalist Society who described how the World Wildlife Fund in the United States had set up a fund to help the cleaning of and rescue of sea birds affected by the oil spill. 669 An article in *The Chicago Tribune* reflects the wider concerns of the community and scientists. It posed the question – 'How the occurrence of so hugely wasteful an accident can be prevented is important to the future.'670 The article's headline implied that with more care the disaster could have been avoided – but it does not specify what 'waste' it particularly refers to – the waste of the Captain's career and those of the ship's men? The waste of the reputation of Union Oil? The waste of the life of the Dutch salvage man who died in an explosion when on the sinking ship? Or the waste of the cargo – the oil that caused such devastation? It could mean all of these things.

⁶⁶⁷ *Ibid*.

⁶⁶⁸ Anon, 'Tanker disaster that blighted golden coast', *Western Morning News*, Saturday 17 March 2007, p. 28.

⁶⁶⁹ Irston R. Barnes, '*Torrey Canyon* bird victims need help', *The Washington Post*, 7 May 1967, p. L11.

Anon, 'Haste makes waste', *Chicago Tribune*, 19 May 1967, p. 20.

The threat Britain faced from the oil was of 'a kind no nation ... [had] ever known before.⁶⁷¹ A *Chicago Tribune* report, critical of the government response, described how Harold Wilson had grossly underestimated the size of the problem. The terminology of the article, referring to the deployment of troops and referencing the then Navy Minister Maurice Foley, implies a warlike effort to overcome pollution. Indeed the headline itself includes the words 'England battles' in it, again indicating an almost military undertaking to combat the oil menace. It also focused on the pollution and destructive effects on the environment, and the effects on birdlife and fish. 672 The political fallout was significant; the government was criticised for not acting quickly enough; the detergent that was used to spray the oil in the hopes of it breaking up, failed to work; and one man died as a result of the sinking. The United States Embassy even described the disaster in similar terms to that of a natural disaster. 673 Harold Wilson and the Duke of Edinburgh flew over the wreck and an emergency Cabinet meeting was convened at RNAS Culdrose. The tardiness of the government's reaction might also account for the growing concern about society's dependence on technology and a belief that scientists were fallible. This concern was portrayed in *Doomwatch* in 1970 where the 'Doomwatch' department was set up to investigate unregulated scientific research (Chapter 5).

In June 1967 *The New York Times* discussed the spill in an international (primarily North America-focused) context. The article's title, 'The oil around us' is symbolic, reflecting back to Rachel Carson's book *The Sea Around Us*. Whilst Carson had already died by March 1967, the article questions how she would feel about it, if she were alive. Much of her early research and the three books she

⁶⁷¹ Arthur Veysey, 'England battles tanker oil peril on its beaches', *Chicago Tribune*, 26 March 1967, pp. 1, 7.

^{°′}² Ibid.

⁶⁷³ Sheail, '*Torrey Canyon*: The Political Dimension', p. 486.

wrote prior to *Silent Spring* (including *The Sea Around Us*) were based on the theme of marine welfare. The article criticises American intervention, or lack of it, and draws attention to wider issues surrounding marine pollution. President Johnson, the article states, ordered his Cabinet to study oil-contamination on both catastrophic and routine levels, as a direct result of the *Torrey Canyon* disaster. The states of the states

The article's authors, Robert Rienow and Leona Train Rienow argued that petroleum had become 'a devil in our civilisation' – polluting the atmosphere when burnt, fouling the sea, and proliferates in cars which destroy large chunks of the environment (by the roads being built through it to cater for them). ⁶⁷⁶ Pollution begets pollution, they continued, with some sea birds acting as natural scavengers and sanitation workers, cleaning up beaches and keeping them disease free. Nationally, laws regulating activity in the oceans were weak – only international accord would do, and whilst the United Nations has no true legislature, it can assist in international issues like that of controlling oceanic pollution. The article ends with the authors describing the captain of the *Torrey Canyon*: 'The skipper of the *Torrey Canyon* said in anguish: "I feel like they're bombing my father. I should never have left my ship." Perhaps all of us should feel as passionately about the destruction of the seas as the captain did about his ship. It was, we must remember, the cradle of life: we can turn it, fairly quickly, into a grave.' ⁶⁷⁷

Just as at Cow Green before it, the *Torrey Canyon* disaster increased the growing environmental consciousness, informing the public of the 'folly' of

⁶⁷⁴ See Rachel Carson, *The Sea Around Us* (New York: Oxford University Press, 1951). This was the second of Carson's so-called 'sea trilogy' which started with *Under the Sea Wind* (New York: Simon & Schuster, 1941) reissued by Oxford University Press after the phenomenal success of *The Sea Around Us*, and the trilogy finished with *The Edge of the Sea* (Boston: Houghton Mifflin, 1955).

Sea (Boston: Houghton Mifflin, 1955).

675 Robert Rienow & Leona Train Rienow, 'The oil around us', *The New York Times*, 4 June 1967, p. SM13.

⁶⁷⁶ *Ibid.*

⁶⁷⁷ *Ibid.*

technological progress. The catastrophe was estimated to have caused the death of over 30,000 birds. ⁶⁷⁸ Both of these issues forced the public 'to realise that a high price was being paid for economic growth. Those who, a few years before, had been derided by businessmen and political "realists" as "bird lovers" began to be taken seriously. ⁶⁷⁹ It fed into this general malaise about the state of society and technological advancement and caused people to think differently about it. It was an indication of the success of informing the public about events like *Torrey Canyon* that by 1970 the government, landowners and users were now 'consciously seeking ecological advice. ⁶⁸⁰ Cow Green, the *Torrey Canyon* 'and other techno-industrial disasters and disruptions provided a continuing thematic punctuation of the credibility of technocratic modernisation. They contributed to a growing mistrust, not only of the Establishment … but also of the top-down and technocratic panaceas for that order's social and economic stagnation. ⁶⁸¹

To understand the legacy of the disaster, it should be noted that at the United Nations Environment conference in 1972, oil pollution was a key debating issue.⁶⁸² It also led to a reform of maritime laws, which were strengthened after the disaster.⁶⁸³ It differed from the first major post-war environmental disaster in Britain, the great London smog, in various ways. Firstly the media had not developed during the smog to the same extent as it had by 1967, so the *Torrey Canyon* received far more coverage. Secondly, it occurred in an already

 ⁶⁷⁸ Bill Freedman, Environmental Ecology: The Ecological Effects of Pollution, Disturbance, and Other Stresses (London: Academic Press Limited, 1995), p. 168.
 ⁶⁷⁹ Jeremy Swift, 'How conservation came to town', The Guardian, 1 February 1970, p. 8.

⁶⁸⁰ Sheail, Seventy-five years in ecology, pp. 232, 236, 240.

⁶⁸¹ Bryn Jones, 'All Along the Watershed: Sixties Values as Defence of Community Lifeworlds in Britain 1968-2008', in *Sixties Radicalism and Social Movement Activism: Retreat or Resurgence?*, edited by Bryn Jones & Mike O'Donnell (London: Anthem Press, 2010), p. 12.

⁶⁸² See Conservation Society booklet, 'United Nations Conference on the Human Environment 1972: Memorandum from the Conservation Society to the Secretary of State for the Environment', MD8037 Acc. 1999/63, The Conservation Society, SCA. ⁶⁸³ Leo Hickman, 'Black moments: The world's most infamous oil spills', *The Guardian*, 30 April 2010, G2 Section, p. 7. Anon, 'Oil pollution peril grows, panel warns', *The Washington Post*, 23 September 1967, p. A3.

environmentally conscious society, whereas in 1952 this consciousness was only in its infancy. It also reflected the evolving nature of environmentalism. Within this context, a new environmental-conscious pressure group was born to protect the environment and lobby for government intervention in protecting the natural world.

The Conservation Society

'Many societies exist' Lady Eve Balfour commented in 1966, which are tackling environmental problems 'individually, in the world as a whole and in selected areas. It will be our aim to try and co-ordinate their activities, and to ensure that pressure is brought to bear where it will be most effective.'684 Until the mid-1970s, the Conservation Society 'was the best known and the largest of the ... environmental groups in the UK.'685 Yet this is a group which has slipped below the radar of many academics who study environmental issues.⁶⁹⁶ One reason for this might relate to the Society's focus on population during its early years. This is still a controversial issue in the environmental movement and might have made the group less popular with scholars. Its focus on population, however, was rooted in environmental analysis, and the group argued that every environmental problem was caused by population growth, which desperately needed to be tackled. Whilst its population policies have been criticised by some, as they linked these to health, economic and environmental issues, they achieved something which Kimber, Richardson & O'Riordan claim helps groups to be successful – they linked their

⁶⁸⁴ Balfour, 'Inaugural address to the Conservation Society', p. 1, SCA.

Horace Herring, 'The Conservation Society: Harbinger of the 1970s Environmental Movement in the UK', *Environment and History*, 7:4 (2001), p. 381.

Adam Lent makes no reference to the Society in his work on British social movements, using both pages of his analysis of pre-1970s environmental awareness in Britain to discuss the World Wildlife Fund. Christopher Rootes also fails to discuss this group in detail in his work. For instance, in his work describing environmental non-governmental organisations in England, his focus on pressure groups in the 1960s includes no analysis of the Society – see Rootes, 'Environmental NGOs and the Environmental Movement in England', pp. 207-208.

aims to non-environmental factors and making issues as inclusive and appealing as possible. 687

The Society was founded in July 1966 by Dr Douglas MacEwan who was first interested in environmental issues after reading a *Playboy* article by Julian Huxley in 1965. 688 *Playboy* might at first seem like an odd catalyst but it also connects to the founding of PEOPLE in 1973, when some of the party's founders also read an interview with Paul Ehrlich in the magazine, became concerned about mankind's impact on the environment and decided to do something about it. 689 Seeing there was no specific organisation in Britain to deal with the myriad of environmental problems, MacEwan and others engaged in correspondence to newspapers highlighting the problems and attracting awareness to the issues. 690 Studying the list of committee members who joined immediately the Society was established, (a total of 22 are listed), many on the list have a brief statement after their names as to their specialism and what they could bring to the Society. After Rev. Christopher G. Edwards's name, for instance, it was noted he had many contacts in the Church and in the Labour Party, which he could exploit for the benefits of the Society. Similarly, Michael Watts was able to take a proposal from the Society to the Liberal Party's Assembly. 691

As the Conservation Society grew, local branches held public meetings, 'with attendances of up to 400,' participated in local festivals, public lectures and

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⁶⁸⁷ Kimber & Richardson, 'Conclusion: tactics and strategies', pp. 212-218; Brookes & Richardson, 'The Environmental Lobby in Britain', p. 313; O'Riordan, 'Public Interest Environmental Groups', pp. 409-410.

⁶⁸⁸ Douglas MacEwan, 'Some Recollections of the Formation of the Conservation Society', Conservation Society booklet, text of address made to the Conservation Society's Annual Conference, 1987, MD8037 Acc. 1999/63, The Conservation Society, SCA.

⁶⁸⁹ See *Playboy* magazine, August 1970 for Ehrlich article – http://members.i.playboy.com/Playboy-Magazine-Archive/19700801/page-62 – accessed electronically 24 August 2013. Huxley's article is in January 1965 called 'The Age of Overbreed'.

⁶⁹⁰ Suggested Programme, SCA; MacEwan, 'Some Recollections', SCA.

⁶⁹¹ List of Provisional Committee of the Conservation Society, 22 July 1966, MD8037 Acc. 1999/63, The Conservation Society, SCA.

wrote letters to the press. Local groups gave evidence at public inquiries and teaching guides for use in schools were also produced by the Society. 692 Sandy Irvine used some of the publications when teaching young people at the end of the decade. He described how reading the Society's leaflets and publications left him feeling inspired and educated about environmental issues. 693 The media interest led to an exponential rise in the Society's membership numbers, with over 4,600 new members joining in the year 1971-1972. At its peak, membership figures were around 8,700 in November 1973.694 Whilst this is still a relatively small number, it reached its peak at a time when other environmental groups were only just starting out (and also PEOPLE took up the mantle of some of the Society's arguments). The very fact of its existence in the later 1960s reveals that there was a desire for such a group. It established local branches which were 'the centres for early environmental activity.'695 Friends of the Earth imitated this practice later, but the Conservation Society did it first. The importance of this Society comes less from the number of members, but from the fact that it was an early environmental group which offered a policy of environmentalism not dissimilar to those offered by groups in the 1970s; the one difference was that many of the 1970s group engaged with direct action whilst the Conservation Society was moderate, more akin to the National Smoke Abatement Society or the World Wildlife Fund than to Friends of the Earth or Commitment. The Society was also a proactive group, more indicative of the 1970s environmental movement, than of those groups which existed in the years after the Second World War.

⁶⁹² The Conservation Society Newsletter, Vol. 5 No. 4, Sept/Oct 1971, pp. 13-14, G.39, Papers of Sir Peter Scott, GB0012, CUL.

693 Interview with Sandy Irvine, 3 April 2012.
694 Herring, 'The Conservation Society', pp. 390-392.

⁶⁹⁵ *Ibid*, p. 383.

In addition, at the beginning of the 1970s, the Conservation Society appointed Paul Ehrlich as its president. Ehrlich had written the controversial best-selling book *The Population Bomb* (published in 1968), which out-sold *Silent Spring* and became 'the most widely read ecology book of the 1960s.'696 This gives the Society some credibility; whilst Ehrlich has long been known for his stance on population, he is still an academic and having written a book which out-sold Carson's was impressive and a strong move from the Society. Even his archnemesis, in terms of environmental beliefs, Barry Commoner was an early member of the Society (Ehrlich argued that a burgeoning population was the problem whereas for Commoner it was society in general). The Society is also worth discussing here because it provides an example of how ideas became more inclusive of different environmental issues. The Society's view was taken from an ecological standpoint.⁶⁹⁷ In 1969, the Select Committee on Science and Technology produced a report concerning population issues.⁶⁹⁸

The Conservation Society was a promotional pressure group and in discussing such organisations in Chapter 1 it was noted that some groups are most successful in the aftermath of external change – for instance, the National Smoke Abatement Society reached its peak as a result of the great smog.

Similarly, the greater environmental awareness which had begun in the 1940s and 1950s, and continued in the early 1960s had left a need for a group which dealt with environmental issues. The Conservation Society did that, and filled a gap. In its beliefs, it incorporated much of what had been a concern since the war,

⁶⁹⁶ Björn-Ola Linnér, *The Return of Malthus: Environmentalism and Post War Population-Resource Crisis* (Isle of Harris: White Horse Press, 2003), p. 172; Chris H. Lewis, 'Ehrlich, Paul', in *Conservation and Environmentalism*, edited by Paehlke, p. 207; Paul Ehrlich, *The Population Bomb* (London: Ballantine Books, 1969).

⁶⁹⁷ Balfour, 'Inaugural address to the Conservation Society', p. 3, SCA.
⁶⁹⁸ See 'Population', Minutes of Evidence and Appendices, Select Committee on Science and Technology, 1969-1970; 'Population of the United Kingdom', Select Committee on Science and Technology, First Report, 1970-1971.

problems of air pollution, pesticides and 'pollution of the ground,' together into a more coherent policy. It worked to educate the British public in environmental issues whilst also lobbying and pressuring the government to adopt more environmentally friendly policies. Society member Sam Lawrence and founder (director) John Davoll were both involved in writing the influential 'A Blueprint for Survival,' published in 1972 (Chapter 5).

In 1966, Lady Balfour, founder of the Soil Association and relative of the former British Prime Minister Arthur Balfour, gave the inaugural address of the Society. She described how the British public had begun to be more environmentally conscious. 'Innumerable conservation groups, some Government sponsored, some voluntary associations, have been established in recent years,' she stated, 'to try to cope with one or other of the many threats to different parts of our natural heritage, but until now, no society had ventured to set itself so formidable a target as first to recognise that true conservation really means wholeness, and then to plan to bring it about by co-operating with, and launching a massive venture in education.'700 The Conservation Society undertook this. This is significant – as discussed previously, environmental ideas, the later 1960s, became more inclusive, concerned with many different environmental issues and with critiques of society as well as environmental destruction. In this way, therefore, the Conservation Society acted as the bridge between more traditional groups of the 1940s and 1950s and the more radical ones of the 1970s. The difference between the latter and the Society itself was that the Conservation Society still contained elements of the moderate groups of the immediate post-war

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⁶⁹⁹ Ann Black & Pat Davoll, 'John Davoll obituary', *The Guardian*, Thursday 11 March 2010 – http://www.guardian.co.uk/environment/2010/mar/11/john-davoll-obituary – accessed electronically 31 January 2013.

⁷⁰⁰ Balfour, 'Inaugural address to the Conservation Society', p. 3, SCA. During Balfour's speech, she refers to the Conservation Society's aims in another booklet. See The Conservation Society – Statement of Aims, MD8037 Acc. 1999/63, The Conservation Society, SCA.

years; it was not overtly radical, as many later groups were. What the Society was concerned with, she continued, was 'our whole attitude towards the future of man on this planet – the relationship between man and his environment.'701

Continuing, she described all the specific environmental problems of the world at that time. Beginning with 'Air,' she defined air pollution as a 'menace,' echoing back to the term used in connection with smog in the 1950s. She further stressed this link when she mentioned that plants need oxygen to grow and reproduce and air pollution was preventing that uptake of this gas in plants (Chapter 2 noted that air pollution can cause stunted growth of plants). 702 This can also be connected with the Commitment and SOC'EM groups in the 1970s. 'Diesel fumes and the exhaust gases of ordinary motor cars are among the most toxic' of air pollutants. 703 Commitment marched into central London to demand a reduction in car usage and part of SOC'EM's anti-motorway argument involved the effects of air pollution, from motor vehicles, on lungs (Chapter 5). Yet despite these connections to 1970s pressure groups, the Society has featured little in literature on 1970s British environmentalism.

Under the heading 'Water,' whilst this speech was given before the *Torrey* Canyon disaster, she linked air and water pollution together by arguing that the problems and causing (essentially humans dominating the natural world) were the same. She also noted the important role trees play within the environment in general. This is an issue which features in Chapter 5 with regards to SOC'EM and the 'Plant a Tree in '73' year. Under 'Soil,' she touched on the use of pesticides and DDT, a theme taken up by the political party PEOPLE later, when on the campaign trail, their supporters brought soil samples with them to explain to

⁷⁰¹ Balfour, 'Inaugural address to the Conservation Society', p. 3, SCA. ⁷⁰² *Ibid*, p. 5.

people the difference between organic and fertilised soils.⁷⁰⁴ She also spoke of 'the conservation of wild life. Too often its conservation is thought of solely in terms of amenity, recreation, or scientific research. All these are important, but even more important is our dependence on it, not only for the quality of living we so wish for, but also for our very survival.⁷⁰⁵

This speech reinforces the central hypothesis of this thesis that environmental ideas originated from the end of the war. It is also some evidence of the more inclusive nature of environmentalism in the 1970s, with links to the issues previously discussed. Numerous environmental groups had existed previously, but none which provided as wide a scope, concentrating on the 'wholeness' of environmental issues as the Conservation Society. Although the previous chapters depict the continual growth of an environmental consciousness, it took almost three decades to reach this point, where environmental ideas began to be intertwined. Now the issues were no longer seen as 'either/or'; instead they became 'and.' The Conservation Society was the first post-war protest group which embraced this wholeness of the environment, and it was on this theme which groups of the 1970s built. Just as in the case of the National Smoke Abatement Society in Chapter 2, where it was stated that it connected some other issues – for instance, economic and health – to environmental ideas about clean air, now the Society went further in bringing all environmental issues under one umbrella. It amalgamated all the ideas which had grown in the previous years. Whilst it was a pressure group, it was not indicative of the more radical nature of groups in the 1970s, but did manifest the beginnings of general inclusivity which existed later. The Society adopted an ecological stance and wanted a balance

⁷⁰⁴ *Ibid*, p. 6; Anon, 'Now soil enters the campaign', newspaper cutting, MSS.50X/4/2, Modern Record Centre (hereafter MRC), University of Warwick, Coventry.

⁷⁰⁵ Balfour, 'Inaugural address to the Conservation Society', p. 6, SCA.

between mankind and the rest of nature. This is significant and shows a real shift in environmental ideas.

The Conservation Society agreed several themes for their national policy, some of which echo back to issues (regarding nature conservation) discussed previously. For instance they viewed the 'unspoilt country' as one of the nation's 'natural assets.'⁷⁰⁶ The idea of 'unspoilt country' harks back to the poster in Chapter 2 (Figure 1) which showed the country spoilt by litter, and river pollution. It also called for measures to protect 'parts of ancient cities,' a cause for which SOC'EM worked; as well as preventing motorway construction they wanted the betterment of Newcastle as a 'historic, living city' and wanted to preserve important public buildings. In addition, it advocated the prevention of noxious vapours and pollution of the air and water, which linked back to both the clean air campaign in Chapter 2, and the *Torrey Canyon*.⁷⁰⁷

In a leaflet 'The Crisis – what it is & what should be done,' published in 1974, the Society claimed that Britain could not solve social problems by increasing material consumption.⁷⁰⁸ Two years previously, 'A Blueprint for Survival' had also begun by stating: 'The principal defect of the industrial way of life with its ethos of expansion is that it is not sustainable.' It warned that 'per capita consumption has a considerable impact on the environment, in terms of both the resources we take from it and the pollutants we impose on it.' Similarly PEOPLE warned against excessive economic growth, preferring to advocate an alternative economic non-growth policy (Chapter 5). Indeed in the final section of the leaflet,

⁷⁰⁶ The Conservation Society – Suggested Programme, p. 1, MD8037 Acc. 1999/63, The Conservation Society, SCA.

⁷⁰⁷ *Ibid*, p. 2.
⁷⁰⁸ 'The Crisis – What it is & what should be done?', p. 2, MD8037 Acc. 1999/63, The Conservation Society, SCA.

⁷⁰⁹ Edward Goldsmith, Robert Allen, Michael Allaby, John Davoll and Sam Lawrence, 'A Blueprint for Survival', *The Ecologist*, 2:1 (1972), p. 2.

⁷¹⁰ Ibid; 'The Crisis – What it is & what should be done?', p. 2, SCA.

titled 'Political Choices,' it argued that the public should consider 'an orderly transition to a sustainable society' and questions which political party is able to do that.⁷¹¹ Whilst not directly coming out in favour of PEOPLE, in the language used it is implied that voters should consider voting for a political party that would push for this society which is what PEOPLE subsequently did.

Population was an important issue for the Society, and one which dominated much of the early thinking of the group. In this way it linked with other social movements of the period, such as the women's movement, in advocating the use of contraception and free access to birth control for all. The Society's first President was Dr Edwin Brooks who was responsible for the National Health Service (Family Planning) Act of 1967. 4ssociated with this campaign for birth control, was the implicit desire by some of its supporters for sexual freedom and liberation ... This desire was made into a central theme of the 1960s "youth" protest movement and the emerging "alternative" society or counterculture. '713 Therefore many supporters joined the Society because of its advocacy for birth control. Conservatives and others also joined the Society. They advocated immigration controls as a solution to over-population. This approach to population was one which included the environment. Undeniably, the environment was central to the group's mission statement from the beginning. Concern for natural resources, and the health of the environment was directly linked to population policy.714

⁷¹¹ 'The Crisis – What it is & what should be done?', p. 4, SCA.

⁷¹² Brooks was President between 1966-1967. See leaflet, Manifesto – The Conservation Society, MD8037 Acc. 1999/63, The Conservation Society, SCA; See also The Family Planning Association history factsheet – http://www.fpa.org.uk/factsheets/history-family-planning-services – accessed electronically 5 February 2014.

⁷¹³ Herring, 'The Conservation Society', pp. 382-383.

⁷¹⁴ Suggested Programme, SCA.

This was also perhaps the most contentious environmental issue in late 1960s Britain. Whilst the government claimed in 1958 that they had 'no evidence to suggest that the pressure of the population on the available resources of ... [Britain] ... has now reached a dangerous degree,' many people were concerned. Both 'A Blueprint for Survival' and Limits to Growth included sections on population growth, and the ecological political party PEOPLE was called such in part because it was interested in population issues. Ehrlich's *The Population Bomb* only reaffirmed what many feared. This offered an argument about the explosion of the world's population which was expected in the future. In 1971, a Panel was established by the government to 'assess the available evidence about the significance of population growth for both public affairs and private life in this country.' Whilst the Panel's Report did not discuss pollution in detail, it did make reference to it on several occasions, claiming that 'In the absence of anti-pollution action a growing population would make things worse.'

This was an issue in the ascendency. Whilst controversial in the 1970s, it impacted many different aspects of the environmental movement. Script writer Malcolm Hulke, who at the beginning of the 1970s penned several *Doctor Who* and *Doomwatch* stories, pitched a television play called 'The Water' to the BBC, who rejected it, seeing it as inappropriate for that network. In reply, Hulke wrote that the idea for the story (of which there is no more information) came from 'a group of middle-class male idiots in a bar, and the subject of over-population came up. To a man they all pronounced that the problem, so far as the "civilised" countries were concerned, was licked, and there was absolutely nothing to worry

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⁷¹⁵ Earl Waldegrave, House of Lords Debate, 'Britain's Population and Resources', 20 November 1958, vol 212 cc747-66 –

http://hansard.millbanksystems.com/lords/1958/nov/20/britains-population-and-resources#S5LV0212P0_19581120_HOL_84 – accessed electronically 22 July 2013. Report of the Population Panel, March 1973 (Cmnd. 5258), p. 88.

about. They then continued to down their beer. ... the play would be stark, almost terrifying.'⁷¹⁷ Hulke's pitch reflects the Conservation Society's concern about population but also how it linked to other environmental problems. These issues fed into a general fog about environmental destruction which had begun to be expressed more overtly in the later 1960s. Alongside population, Cow Green, Aberfan and the *Torrey Canyon* provided examples of the dark side of modernisation, feeding unease about technological solutions to problems. The *Doomwatch* story 'The Human Time Bomb' (which aired on 22 February 1971, and written by Louis Marks, who had also penned the 1960s *Doctor Who* story 'Planet of Giants') featured an analysis of population growth and the effects on urban population, with many living in high-rise flats. ⁷¹⁸ In this way, then, the Conservation Society fed into this unease by criticising the established order, not only by specific environmental issues but by taking them together and with other issues. This did not fully reach fruition until the 1970s, however (Chapter 5) but began in this period.

The Society's arguments questioned the validity and value of economic growth, technological advancement and the idea of progress. ⁷¹⁹ John Davoll claimed that the group wanted to reverse the existing perception that the current economic system was stable. ⁷²⁰ By posing an intellectual challenge to ideas about modern society, the group was able to communicate clearly an alternative way of living. In doing so, it was largely successful. Both *Limits to Growth* and 'Blueprint' strongly argued for a revision of the economic structure of society. ⁷²¹ These can

⁷¹⁷ Letter from Malcolm Hulke to the BBC, 5 July 1965, in response to their rejection of his play 'The Water', T48/333/1 – Malcolm Hulke (Drama Writer's File), WAC.

http://www.doomwatch.org/ – accessed electronically 20 February 2014.

⁷¹⁹ Herring, 'The Conservation Society', p. 383.

John Davoll, 'The Conservation Society, 1966-1987: Lessons of a Post-Mortem' by John Davoll, 4 November 1990, MD8037 Acc. 1999/63, The Conservation Society, SCA.

721 Suggested Programme', SCA.

be seen as a response to the Society and the arguments it made. Rather than opposing them, they supported the group's ideas.

A leaflet, 'Your chance to take action for survival,' was also produced by the Society. This was a call-to-arms for likeminded individuals to 'play a more active role in the fight against pollution, overpopulation and overexploitation of the environment.' It called for members to educate themselves on environmental issues so they could know the best way to tackle them. It inspired them to contact local authorities and write to their MP, to newspapers and speak to anyone who would listen about these issues. It discussed how to pass on information about the Society and hold lectures in youth clubs, Women's Institute meetings, in schools and colleges. It also asked members to distribute literature and put up posters in workplaces and libraries as well as calling for more volunteers to help in local branches. It advocated that members should become active – engage in direct action, write letters and start petitions, and hold public meetings. Its final point encouraged members to join the sub-committees of the Society. Test

The Conservation Society's success in the early years accounted for the (relatively) sparse landscape with regards to environmental groups. Like the National Smoke Abatement Society, it was seen as a moderate, expert group with influence and access to Members of Parliament and articulated arguments to include non-environmental issues. In addition they successfully exploited the media and used it to their advantage. It also appeared at a time of 'change factors' (Chapter 1) when there were few other societies dedicated to conservation in Britain, and certainly not one which advocated population control. As seen in Chapter 3, conservation issues were increasingly gaining traction during the early

Leaflet 'Your chance to take action for survival', G.39, Papers of Sir Peter Scott, GB0012, CUL.

⁷²³ Ibid

1960s, with the success of the first National Nature Week as an example. When the *Torrey Canyon* spilt its oil, it seemed like the Society's concern about the technological progress of mankind had come true. It was also the first of the proactive environmental pressure groups which appeared in the 1970s (Friends of the Earth being an example). There was not one main catalyst with which the group was founded on; instead there was a general concern about the state of the natural world.

During a post-mortem of the group's decline, held in 1990, it was claimed by Davoll that by the early 1970s the Society was well placed to take advantage of the growing concern for the environment at the beginning of the 1970s and which peaked with the United Nations (UN) Conference on the Human Environment in 1972, and the publication of 'Blueprint' and the Club of Rome's *Limits to Growth*. Membership declined slowly in the later 1970s. Part of the reason for this was external factors – the early 1970s saw the emergence of more radical groups such as Friends of the Earth, who conducted high profile, single issue campaigns, and the Conservation Society could not compete. Teach Its initial success was a result of the sparse landscape in which the Society acted. Conversely it declined because that field had become saturated, and the Society could no longer stand out. It failed to attract younger people who were more interested in more radical groups like Friends of the Earth.

In its aim of educating the public, the Conservation Society was successful, occupying itself with criticism of disasters like the *Torrey Canyon*. It involved itself in planning for the UN Conference in 1972.⁷²⁵ The Society contributed to a growth

Davoll, 'The Conservation Society, 1966-1987: Lessons of a Post-Mortem', SCA.

See J.H. Goodland, 'Examining alternatives', Letters to the Editor, *The Times*, Tuesday
May 1967, p. 11; Balfour, 'Inaugural address of the Conservation Society', p. 1, SCA;

¹⁶ May 1967, p. 11; Balfour, 'Inaugural address of the Conservation Society', p. 1, SCA; Memorandum from the Conservation Society to the Secretary of State for the Environment concerning the UN Conference on the Human Environment, 1971, MD8037 Acc. 1999/63,

in environmental consciousness of the British public through its interaction with the media and through its education practices. It was also active at a time when there was no other comparable group campaigning on environmental issues. The 1960s did see environmental protests, such as that at Cow Green, but they did not attract much support beyond a limited group of people. Moreover Cow Green and the Torrey Canyon reflect the wider concerns, growing in this period which built on the consciousness already in existence. These concerns were more inclusive and critiqued industrial development and technological growth. This can clearly be seen in the BBC drama series Doomwatch in 1970 (Chapter 5).

The 1971 Annual Report from the Society notes that by '1970, public concern had been aroused in the industrial countries by a realisation that a rising material standard of living was being accompanied by a decline in what became known as "the quality of life." The 'quality of life' issue is one which stretched across the whole of the thirty year period of this thesis. For instance, many of the arguments which the National Smoke Abatement Society made about switching from coal to cleaner types of fuel, involved discussion about how people's quality of life would improve. Even in the film Guilty Chimneys the description of the smog as a murderer is indicative of this. One of SOC'EM aims was to fight for the betterment of Newcastle city against the "concrete jungle" which existed and which was going to be expanded in the city. 727 Ideas in 'A Blueprint for Survival' about returning to a time of hunter-gatherers imply that life would improve and society and community cohesion would get better; as a result, people's health would also improve.

The Conservation Society, SCA: Memorandum from the Conservation Society to the Working Party on Resources, UN Conference on the Human Environment, 1971, MD8037 Acc. 1999/63, The Conservation Society, SCA.

Annual Report – 1971, The Conservation Society, MD8037 Acc. 1999/63, SCA.

The activities of the Conservation Society are important to this thesis because they helped set the agenda for the following decade with a critique of technology and challenging growth. The Society sought to influence political policy and educate people in environmental issues. It was effective in its education policies and setting the tone for the 1970s environmental groups. It is an example of how far environmental ideas had come in the previous years. In its manifesto, it specifically includes the issues discussed in previous chapters, with information on air pollution, water pollution, waste and toxic chemicals. Its strength lay in its ability to connect all these together; its weakness, to fully exploit these issues at the beginning of the 1970s when more radical groups appeared. These groups were not so different ideologically from the Conservation Society, sharing many of the same ideas, but their activities held wider popular appear, particularly among the young.

Conclusion

The 'cataclysm of nature' described through the three case studies in this chapter represent a change in perception of how the public viewed the natural world. In Chapter 2, Stuart Hall's encoding/decoding theory was used to analyse the responses to the clean air exhibitions during the 1950s. He argues that often television viewers are able to recognise and understand familiar images used in television programmes because they remind viewers of real-life objects. Returning to his theory here, whilst Cow Green nor the *Torrey Canyon* were themselves television programmes, they nevertheless provided the public with

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⁷²⁸ Lord Henley described many different environment problems of the late 1960s and which would dominate the 1970s, including Cow Green and the expansion of motor vehicle usage. See Lord Henley, House of Lords Debate, 'Development and Threats to Amenity', 19 February 1969, vol 299 cc821-904 –

http://hansard.millbanksystems.com/lords/1969/feb/19/development-and-threats-to-amenity#S5LV0299P0_19690219_HOL_100 – accessed electronically 4 September 2013. Hall, 'Encoding and Decoding in the Television Discourse', p. 11.

physical examples of environmental destruction. Those people on holiday in Cornwall in March 1967 would have been faced with an image not dissimilar to those Londoners who experienced the great London smog of 1952. In both people observed the effect of pollution on the environment; with the *Torrey Canyon* however, media had developed to such an extent that it was not merely those who lived or holidayed in Cornwall who experienced this; instead footage was shown around the world. With regards Cow Green, whilst this was less well-covered than the oil spill of 1967, it still appeared in American newspapers and offered another example of industry destroying the environment.

It was within this context that Douglas MacEwan and other concerned citizens moved to respond to a growing sense of unease by launching a new proactive pressure group, focused on opposing the technological advances which had brought about this destruction, and a population surge which might lead to future catastrophe. This pressure group operated in a similar way to those of the post-war period, like the National Smoke Abatement Society, in its moderate approach to issues. However, rather than concerning itself simply with smoke abatement, or with wildlife conservation, it adopted a more inclusive, bio-centric approach to environmental issues. Whilst there had been mounting concern about the destruction of the environment prior to the founding of the Society in 1966, it was only in this period when conservationism matured into environmentalism. This did not happen suddenly; there had been a gradual move away from single issues to a more inclusive outlook. From the case studies here, however, a new phase of the progression of environmental ideas in Britain can be observed.

Environmentalism, by 1969, had become the dominant belief of many pressure groups.

Environmental ideas progressed through another phase in this period, with environmentalism, the ideology of the environmental movement, subsuming conservationism, and adopting a more inclusive outlook. Two events in particular helped this along – the Cow Green battle and the *Torrey Canyon*; although an anti-technological concern had already begun to develop in Britain these two events provided evidence of the perils of industrial development. This context was not as clear in the opposition to Thirlmere at the beginning of the twentieth century, and sets this period apart. The first environmentalist pressure group – the Conservation Society – also appeared. By looking at the wider political environment, it is clear why the movement emerged in the early 1970s. This was a period of political change, when environmental issues appeared in mainstream politics for the first time and there was no longer a sense of simply focusing on the despoiling of the environment, but also tackling those who despoiled it. Although Rootes' networks did not yet exist, it was in this period when the ideology and beliefs of the movement appeared in a more concrete way.

The Conservation Society was established in a period following an increasing environmental awareness, yet no environmentalist-orientated pressure group existed, one which connected environmental together in an inclusive way. It was in this context, therefore, which the Society emerged but also within which it flourished. Until the appearance of more radical groups in the 1970s, it was one of the major environmental pressure groups in the country. Its resources, however, led to be its failure later, as its more radical members drifted away towards newer groups such as Friends of the Earth, leaving a more conservative, older, core.

In 1969, Lord Byers described ecology as 'a way of thinking ... [and] an attitude to life' claiming that there was a great deal of public interest in

environmental problems (which reflects the better informed public). 730 Words such as ecology, eutrophication, polychlorinated biphenyls (PCBs) and industrial effluent became 'the common coinage of debate.'731 This is what the Conservation Society argued – that environmental problems should be viewed not just as a specific problem, but also look at how environmental issues connected together. As a result of this, the Prime Minister Harold Wilson included pollution in his Labour Party Conference Speech for the first time in 1969, placing the environment at the centre of the political world from then on. This also led to the establishment of the Department of the Environment in 1970 (Chapter 5). 732 The environment had now entered political discourse.

The period 1970-1975 saw the emergence of the environmental movement which was built on ideas which had prevailed over the previous decades in Britain. Compared with the immediate post-war years, this was a more inclusive movement, and saw 'a broadening of concern from single issues to the ecology of the whole planet. This change had begun with the move from conservationism to environmentalism in the later 1960s, as seen above, and the Conservation Society continued this change. Influenced by Cow Green and the *Torrey Canyon*, the Society advocated zero growth policies (prior to their adoption by others in the 1970s) and sought to educate future generations in environment issues.⁷³⁴ An article in *The Guardian* from 1970 described how in the previous year 'both the public and officialdom have become aware that the environment is everything, and

⁷³⁰ Lord Netwon, House of Lords Debate, 'Development and Threats to Amenity', 19 February 1969, vol 299 cc821-904 -

http://hansard.millbanksystems.com/lords/1969/feb/19/development-and-threats-toamenity#S5LV0299P0_19690219_HOL_65 – accessed electronically 23 July 2013.

731 Adam Fergusson, 'Pollution: Waking up to the mess', *The Times*, Wednesday 31

December 1969, p. 5.

⁷³² Stevn & Wessels, 'Environmental Non-Governmental Contributions', pp.100-101.

⁷³³ MacEwan, 'Some Recollections', SCA.

⁷³⁴ J.H. Goodland, 'Examining alternatives', Letters to the Editor, *The Times*, Tuesday 16 May 1967, p. 11.

that what goes wrong in one quarter is reflected, sometimes directly and sometimes more subtly, in a variety of others. In a foreshadowing of the bottle campaign of Friends of the Earth in 1971, boys at a Cheshire school in 1970 dumped rubbish from the grounds of the school in front of the head and turned to their schools saying they were responsible for the mess. In that decade, the BBC's hugely influential series *Doomwatch* built on many of the issues and concerns which had surfaced as a result of the disasters discussed here. Pollution became a popular topic and by 1970 this was by the *Doctor Who* story 'The Green Death' and the series *Doomwatch* both, exemplified focusing on this theme, amongst others. Activist groups also took up the pollution mantle: Commitment engaged in non-violent direct action against air pollution in central London, and Friends of the Earth protested at the non-returnable bottle policy of Cadbury-Schweppes, which they argued would cause widespread pollution of the environment. It is into the 1970s that one must travel in order to appreciate the full nature of how the environmental movement developed in the post-war period.

 $^{^{735}}$ Dennis Johnson, 'Saving the green', *The Guardian*, 19 October 1970, p. 11. 736 *Ibid*.

⁷³⁷ See Anon, 'Anti-pollution demonstration', *The Guardian*, 26 October 1971, p. 7, for discussion of Commitment's protest in the Mersey.

Chapter 5 – From awareness to activism: the British Environmental Movement, 1970-1975

Chapter 1 began by referring to the 1970s as 'the environmental decade' and with the establishing of the Department of the Environment, the founding of *The Ecologist* magazine, and the environment being mentioned in the Queen's speech for the first time in 1970, to the first ever international environmental conference in 1972, it is understandable to see why it has been described as such. The evolution of direct action groups and the widespread discussion of environmental issues in the media, as well as some national newspapers appointing specific journalists as environment correspondents, is further evidence of this. Essentially, as so much happened in the first five years of the decade pertaining to the environment, some scholars (such as Dominic Sandbrook, Alwyn Turner and Andy Beckett) see it as a defining period in the history of modern environmentalism. This was the period when the environmental movement came into existence, and when complex networks were made between different environmental pressure groups.

None of this environmental awareness which developed in these years, however, or the popularity of environmental organisations, could have happened had there not been a growing environmental awareness over the previous two decades. As *The Guardian* noted in February 1970, some of the topics described in the previous chapters raised the issue of environmental protection and conservation far beyond Victorian ideas of preservation. 'The giant *Torrey Canyon* oil leak, highlighting sea pollution, was a lucky break for conservationists' whilst Cow Green and the London smog reflected the problems of 'industrial dereliction,'

⁷³⁸ McCormick, *The Global Environmental Movement*, p. 129. See also Turner, *Crisis? What Crisis?*, pp. 49-58. Both *The Times* and *The Guardian* seem to have started using the term 'environment correspondent' from the early 1970s, to refer to specific journalists on their staff.

⁷³⁹ See Sandbrook, *White Heat*, pp. 600-603; Beckett, *When the Lights Went Out*, pp. 136-137, 234-243; Turner, *Crisis? What Crisis?*, p. 57; and Rootes, 'Britain', in *Environmental Protest in Western Europe*, edited by Rootes, p. 21.

with the article concluding 'We are all conservationists now.'⁷⁴⁰ This not only shows how important the issues discussed in the previous chapters were, but also provides evidence of why this chapter is important.

The scope of this project has been to demonstrate some of the post-war influences on the 1970s environmental movement. This chapter highlights some of the issues which are responsible for the 1970s being known as the environmental decade and deals with the ways in which the environment moved to the centre of British consciousness. It reveals that whilst environmentalism did move onto the political agenda of the country, it was as the culmination of ideas which had emerged in previous years discussed through case studies in the previous chapters of this thesis (whilst politicians had discussed the environment previously, this had not been under the environmentalist approach adopted by many at the end of the 1960s). Those discussed below, whilst documenting the continued evolution of environmental ideas in Britain, represent a more inclusive understanding of environmental problems. The volume of pressure groups and activities, media and literature relating to the environment was greatly increased in this period. In the early 1970s, as 'the environment gained political importance ... the environmental lobby' which already existed, such as that analysed in previous chapters, was strengthened and new, important 'pieces of legislation were introduced, including comprehensive measures for pollution control and wildlife protection.⁷⁴¹ This built on the environmental governance and awareness which had developed in the past 25 years when many pieces of environmental legislation had been enacted to protect the natural world.

⁷⁴⁰ Swift, 'How conservation came to town', p. 8.

Neil Carter & Philip Lowe, 'Britain: Coming to terms with sustainable development?', in *Governance and Environment in Western Europe*, edited by Hanf & Jansen, pp. 20-21.

The chapter examines this evolution through studying 'A Blueprint for Survival,' published in 1972; the formation of Britain's first ecological political party PEOPLE in 1973; and how television drama/science fiction series became more overtly environmentally-focussed through evaluating the BBC series *Doomwatch* and *Doctor Who*. These all reveal how the environment became a significant part of the public's consciousness in the period. Through watching *Doomwatch* for instance, audiences made direct comparisons and connections between events on-screen and real life environmental problems; the presence of a new environmentally-interested political party ensured environmental issues remained on the political agenda; and 'A Blueprint for Survival' introduced environmentalism to new audiences, providing solutions to environmental problems.

It also explains this evolution by analysing how new direct action pressure groups became more inclusive (with regards their beliefs). Case studies of some of these new groups are used to reveal how the movement changed in this period. It was not just that there were a greater number of groups which emerged at the beginning of the 1970s, but that they 'condemned not only environmental degradation but also the society that did the degrading.'⁷⁴² Many of the groups which had emerged prior to the later 1960s, Veldman argues, did not perceive 'a major, all-embracing environmental crisis,' in the same way that later groups did.⁷⁴³ Like the Conservation Society, many of the new pressure groups were more inclusive of different environmental problems.

This was a period when new, more radical pressure groups appeared as well as older groups increasing their memberships and becoming more environmental in nature. Three of these new groups are analysed here: two in

⁷⁴² Veldman, *Fantasy, the Bomb and the Greening of Britain*, p. 210.

Newcastle upon Tyne and one based in London. These groups have been chosen because they represent an important shift in environmental activism. The groups were grassroots groups. NIMBY groups in particular are grassroots organisations because they deal with an immediate local concern. Tyneside Environmental Concern (TEC) appeared in Newcastle at the beginning of the 1970s as a direct result of *Doomwatch*, with one of the founders having heard the co-creator of the television programme speak in the city. After this, some questioned why there was no similar organisation (to *Doomwatch*) in the area, and so decided to form one. TEC worked alongside SOC'EM (Save Our City from Environmental Mess) and other local environmental groups to oppose the motorway in Newcastle.

SOC'EM was established as a NIMBY to oppose a stretch of urban motorway being planned to be built through the Jesmond area of the city. Their anti-motorway campaign against this section of the motorway was successful although other plans to curtail the construction of the entire motorway network in Newcastle and the surrounding areas, including Gateshead, proved ultimately unsuccessful. Nevertheless SOC'EM was an early anti-motorway group whose scope received international attention with their motorway report being request by

⁷⁴⁴ Not only did new pressure groups and environmental organisations emerge such as the Campaign for Better Transport (founded in 1972 as Transport 2000), Greenpeace (1977), CoEnCo, the Committee (later Council) for Environmental Conservation (1969), the Royal Commission on Environmental Pollution (1970), the Woodland Trust (1973), and the Socialist Environment and Resources Association (SERA, 1973), an independent environmental organisation affiliated with the Labour Party, but existing groups saw their memberships increase in the 1970s, such as the Conservation Society, WWF, the National Trust, the Royal Society for the Protection of Birds, and CPRE as well as local Wildlife Trusts. Newer groups appeared from the 1980s, such as the Whale and Dolphin conservation Society, Marine Conservation Society, Environmental Investigation Agency, Pond Conservation, Plantlife, Froglife, and the Herpetological Conservation Trust. Radical groups such as Earth First! also appeared, as did more informal coalitions of organisations such as ALARM, which featured groups protesting against road building. Even more traditional groups, such as CPRE adopted a broader environmental critique in the 1970s see Coxall, Pressure Groups in British Politics, p. 30; Rawcliffe, Environmental Pressure Groups in Transition, pp. 18, 26. See also table of environmental pressure groups 1971-2006 in Rootes, 'Environmental NGOs and the Environmental Movement in England', pp. 212-213.

institutions in Canada and South Africa, as well as those spread across Britain. Commitment was a non-violent direct action group which held a protest in London in December 1971 and another in 1973 opposing the priority of motor vehicles over pedestrians in central London, in addition to wider issues of air pollution and the blight cars do to the environment. Whilst their protests were unsuccessful and involved only a small number of people, they were undertaking direct action at a time when few other environmental groups were. The closest organisation which undertook similar action, Friends of the Earth (FoE), wanted to remain respectable so whilst supporting Commitment, did not actively engage in the forms of protest Commitment practiced. Through these events and groups, by 1975 the environment was central to British life and society and had a place within and outside the political arena. From the ideas discussed in Chapter 1 about social movements, it is clear that the environmental movement was present in the 1970s, with broad networks forming between different environmental groups.

As evidence of how things had changed by 1970, The Guardian said the 'little old ladies of a decade ago who wrote anguished letters to newspapers about the cutting down of trees have been reinforced by government departments, pressure groups and consultancy firms devoted to rescuing the human environment.'745 As such, this chapter is a culmination of ideas which appeared in Britain over the previous few years. As reflected in the chapters of this thesis, during the quarter of a century since the end of the Second World War, environmental conservation had sky rocketed from obscurity to a position central to British society. 746 A key difference between the 1960s and 1970s was that, largely during the early years of the former, a period of optimism existed. Whilst some naysayers were present, those Doomwatchers were not able to dominate

 ⁷⁴⁵ Swift, 'How conservation came to town', p. 8.
 746 Nicholson, *The New Environmental Age*, p. xi.

the general feeling of the period. As the decade wore on, however, with the likes of Cow Green and the *Torrey Canyon*, it became increasingly clear that actually, environmental destruction was a real problem for society.⁷⁴⁷

General Environmental Issues ('Plant a Tree in '73')

In the 1970s, there was a shift in the environment's place in the public's consciousness, with ecology becoming 'an attitude to life' and "more popular than sex." ⁷⁴⁸ By 1970, many people showed 'an increasing awareness of the need to prevent further erosion of the natural environment and to take positive steps to enhance the quality of life. ⁷⁴⁹ They viewed a rising 'material standard of living' with a reduction in their own personal standard of living. ⁷⁵⁰ Noting how far awareness for environmental problems within the public's consciousness had come by 1970, the First Report of the Royal Commission on Environmental Pollution described how the dangers of air pollution, water and land were now all a matter 'of great concern' within society. ⁷⁵¹

1970 saw the environment take a new importance across Europe with the launch of a continent-wide initiative to educate citizens about environmental issues

Evans, A History of Nature Conservation in Britain, pp. 154-155.

⁷⁴⁸ Lord Byers, House of Lords Debate, 'Development and threats to Amenity', 19 February 1969, vol 299 cc821-904 –

http://hansard.millbanksystems.com/lords/1969/feb/19/development-and-threats-to-amenity#S5LV0299P0_19690219_HOL_48 — accessed electronically 16 August 2013. A representative from the NC described the environment as being "more popular than sex" and is quoted by Barr, 'The Environment Lobby', p. 209.

⁷⁴⁹ J.M.C. James, 'Man and nature in partnership', *The Times*, Tuesday 16 June 1970, p. 11.

^{11. &}lt;sup>750</sup> *Ibid.* 'Quality of life' issues were also mentioned in Annual Report – 1971, The Conservation Society, SCA.

⁷⁵¹ Royal Commission on Environmental Pollution, First Report, p. 4. See also List of Reports produced by the Royal Commission on Environmental Pollution – http://webarchive.nationalarchives.gov.uk/20060820083451/http://rcep.org.uk/reports2.htm#1 – accessed electronically 7 February 2014. See also Royal Commission on Environmental Pollution, Second Report: Three Issues in Industrial Pollution, March 1972 (Cmnd. 4894); Royal Commission on Environmental Pollution, Third Report: Pollution in Some British Estuaries and Coastal Waters, September 1972 (Cmnd. 5054).

- the European Conservation Year (ECY). The ECY had two main aims - the first was to introduce policies which would improve the quality of the environment throughout the continent; the second was to 'bring home the importance of conservation to everyone, so that support will be forthcoming for the measures that will be necessary to deal with future environmental problems.⁷⁵³ Planning for the ECY had begun in the 1960s, and drew 'much of its strength' from the events and activities which had occurred in Britain over the previous 25 years. 754 As an example of how successful the environmental consciousness had been in the 1950s and 1960s, Arthur Skeffington, in 1969 told the House of Commons that the ECY was a direct result of the two National Nature Weeks, as well as the three 'Countryside in 1970' conferences. 755 Evidence of the 'increasing awareness of the need to prevent further erosion of the natural environment' can be seen in responses to Cow Green reservoir in the later 1960s and even before that with the World Wildlife Fund (WWF) in the early 1960s, and the anti-pollution campaigns in the 1950s (Chapters 2-4). By studying environmental ideas in the 1970s, therefore, it is important to acknowledge the context within which it appeared.

As a sign of the growing environmental consciousness in first year of the decade, during the ECY, 10,000 school children in London became involved in studies of pollution levels in streams and rivers. Following this, another 200 children released balloons launching a survey into air pollution. The balloons were

The Duke of Edinburgh, Prince Philip was quoted by Lord Hurcomb during a debate in Parliament: House of Lords Debate, 'Problems of the Countryside', 18 May 1966, vol 274 cc1005-80 – http://hansard.millbanksystems.com/lords/1966/may/18/problems-of-the-countryside-1#column_1012 – accessed electronically 10 April 2013. See also Edward Mortimer, 'Pollution has no frontiers', *The Times*, Tuesday 10 February 1970, p. 10.

The problems of the Countryside', 18 May 1966, vol 274

The problems of the Countryside', 18 May 1966, vol 274

The problems of the Countryside', 18 May 1966, vol 274

The problems of the Countryside', 18 May 1966, vol 274

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⁷⁵⁴ Bob Boote, 'Obituary: Max Nicholson', *The Guardian*, Monday 28 April 2003 – http://www.theguardian.com/news/2003/apr/28/guardianobituaries.highereducation – accessed electronically 12 December 2013.

⁷⁵⁵ Arthur Skeffington, House of Commons Debate, 'European Conservation Year', 10 March 1969, vol 779 cc1127-38 –

http://hansard.millbanksystems.com/commons/1969/mar/10/european-conservation-year-1970#S5CV0779P0_19690310_HOC_553 — accessed electronically 10 April 2013.

traced to show where the air streams over London blew. The children were assisted by the Advisory Centre for Education in Cambridge, in association with The Sunday Times. 756 This resonates with themes discussed in Chapter 2 about pollution. The involvement of children in experiments and making them aware of pollution is indicative of efforts undertaken to prevent the pollution of waterways in Britain in the 1940s and 1950s, and in Coventry and Sheffield with their clean air exhibitions. These ideas were also taken up by the pressure group Commitment who, as seen below, used balloons filled with fresh air from the countryside to highlight the problems of urban air pollution.

In 1971, FoE published The Environmental Handbook – Action Guide for the UK, encouraging young people to protect the environment. 757 It called for them to radicalise their school, place of work, college and youth club, and urged that they should be as subversive and constructive as they could. According to The Times, this book fitted the then 'fashionable niche of environmental and youth protest, [and] was a good 40p's worth for all do-it-yourself environmentalists.'758 This links back to the analysis of the WWF in Chapter 3, and specifically this organisation's Wildlife Youth Service. The Confederation of British Industry (CBI) held a special conference in honour of ECY in September 1970, during which they identified the need to educated people in environmental issues 'from school upwards.'759 Other organisations, such as the various electricity boards across the

⁷⁵⁶ Anon, 'Children to survey pollution', *The Times*, Monday 19 June 1972, p. 14.

⁷⁵⁷ John Barr (ed.), *The Environmental Handbook – Action Guide for the UK* (London: Ballantine Books, 1971).

⁷⁵⁸ Tony Aldous, 'Sit-down guide to the environment', *The Times*, Friday 19 February 1971,

p. 16.

759 CBI Conference on 'Technology and the Environment', 22 September 1970, G.30,

Grand Call Canada Arthur Skeffington, House of Communication and C Papers of Sir Peter Scott, GB0012, CUL. See also Arthur Skeffington, House of Commons Debate, 'European Conservation Year', 10 March 1969, vol 779 cc1127-38 – http://hansard.millbanksystems.com/commons/1969/mar/10/european-conservation-year-1970#S5CV0779P0 19690310 HOC 553 - accessed electronically 10 April 2013; Arthur Blenkinsop, House of Commons Debate, 'European Conservation Year', 10 March 1969, vol 779 cc1127-38 - http://hansard.millbanksystems.com/commons/1969/mar/10/european-

country, also made plans during 1970 with reference to the ECY, giving 'their wholehearted support to the principles underlying European Conservation Year.'⁷⁶⁰

During the ECY, events were held across Britain celebrating the natural world. The Automobile Association encouraged motorists to plant a tree, setting the scene for what occurred en-masse three years later (with 'Plant a Tree in '73' below, and which also further reflects the significance of this event). ⁷⁶¹ In 1971, Peter Conder, director of the Royal Society for the Protection of Birds, described the ECY as having been an achievement. It had succeeded, or begun to succeed in making European citizens aware of environmental problems, and enlisting their support. He stated that Frank Fraser Darling's *Reith Lectures* in 1969 had popularised pollution and other environmental issues (Fraser Darling was another prominent ecologist who had a good reputation in Britain). ⁷⁶² The consciousness which had developed in previous years came to a head with the ECY, which did much to raise awareness within an already developing environmental consciousness, as shown by many of the public jumping on the conservation "band wagon."

conservation-year-1970#S5CV0779P0_19690310_HOC_546 – accessed electronically 10 April 2013.

^{76b} North Western Electricity Board Reports and Accounts for the year ending 31 March 1970, p. 16. See also South Eastern Electricity Board Reports and Accounts for the year ending 31 March 1970, pp. 2, 8; South Wales Electricity Board Reports and Accounts for the year ending 31 March 1970, p. 6; Merseyside and North Wales Electricity Board Report and Accounts for the year ending 31 March 1970, p. 14.

The Countryside Commission published publication a comprehensive coastal study and a 167-mile Pembrokeshire coast path and the publication of disused railway routes were also established during the ECY. See Anon, 'Staff crisis for country planners', *The Times*, Saturday 3 January 1970, p. 2.

These can be accessed online here – http://www.bbc.co.uk/programmes/p00h3xk5 – accessed electronically 12 December 2013. These were the UK's contribution to the ECY – The Natural Environment Research Council Annual Report, 1970, p. 43, FT6/15, TNA. The director of the Royal Society for the Protection of Birds was quoted in Tony Aldous, 'Conservation bandwagon as a sign of success', *The Times*, Monday 11 January 1971, p. 4. See also The Natural Environmental Research Council Annual Report, 1970, p. 2, FT6/15, TNA.

In November 1970, the new Conservative government established the Department of the Environment, with Peter Walker as the first Secretary of State for the Environment. Had the Labour Party won the general election of 1970, it is likely, Tony Aldous argues, that they too would have established a Department of the Environment. By that time, there was enough concern about environmental problems, particularly pollution, which Harold Wilson had mentioned in his Labour Party Conference speech of 1969, that the establishing of a new Department seemed logical. In the Department of the Environment, planning now came under its control, along with 'two of the activities that affected it most: roads and motor vehicles, and public buildings. And this delighted the conservationists. Motorways, by-passes and other trunk road building have an arguably bigger impact on [the environment] ... than any other activity of government.

As consumerism grew in the post-war period, as already stated, more people purchased goods like television sets, and motor vehicles. By one estimate there were 15 million cars on the road in Britain in 1969; that was predicted to rise by 10 million in ten years. As noted in a debate in the House of Lords, the situation regarding motor vehicles represented 'a national emergency' and that everything was 'conspiring to bring more cars on the roads'; more people could afford them, with more young people buying second-hand models cheaply, as well as cheaper models becoming available. ⁷⁶⁶ Motor vehicles, therefore, became an important environmental issue at this time. ⁷⁶⁷ There was already some concern about the

http://hansard.millbanksystems.com/lords/1969/feb/19/development-and-threats-to-amenity#S5LV0299P0_19690219_HOL_100 — accessed electronically 4 September 2013.

⁷⁶⁴ Aldous, *Battle for the Environment*, p. 23.

⁷⁶⁵ *Ibid*, p. 18.

The figures in motor vehicle ownership were mentioned in a debate in the House of Lords. See Lord Henley, House of Lords Debate, 'Development and Threats to Amenity', 19 February 1969, vol 299 cc821-904 –

Guha mentions the increase in consumerism in society, including a rise in the number of people who owned cars - Guha, *Environmentalism: A Global History*, pp. 80-82 (quote appears on p. 82). See also Richard Kimber, J.J. Richardson & S.K. Brooks, 'The

number of lorries using small towns and villages as shortcuts. 768 The problem of motor vehicles in the early 1970s explains why, of those case studies included here which focus on pressure groups, two deal with motor vehicles. Air pollution was not an issue which disappeared after the Clean Air Act of 1956. It is true that smog (caused by the burning of coal) almost disappeared entirely, but this was replaced by photochemical smog, produced from the chemicals released by car exhausts. Both SOC'EM and Commitment made the case for clean air and focused on the effect of air pollution on humans and on the environment. This was recognised by the Royal Commission on Environmental Pollution which based its first report on the growing issues of air pollution globally. 769

The Department of the Environment now had power to deal with a host of environmental problems under one roof, and despite some failings, the Department did give pressure groups a way to access central government. 770 Peter Walker was the first Secretary of State for the Environment. 'In Peter Walker it [the Department] had a new, young, ambitious minister whose star was clearly in the ascendant.' Aldous notes that the Department was 'a very novel creation.' Walker's position as Environment Secretary gave him freedom and powers which were not available to his counterparts in Europe. 771 The aims of the Department included the renewal, improvement and protection of the environment. Its first priority, as defined in a speech by Walker on 24 February 1971, was to ensure the environment could be enjoyed by the population as a whole, especially those who lived in or experienced a bad environment at that time. 772 Another aim was to

Juggernauts: public opposition to heavy lorries', in Campaigning for the Environment, edited by Kimber & Richardson, pp. 136-164.

Aldous, Battle for the Environment, pp. 31, 38-39, 47-48, 53, 58, 66.

Royal Commission on Environmental Pollution, First Report, p. 1.

Dryzek et al, Green States and Social Movements, p. 44.

Aldous, *Battle for the Environment*, pp. 11-13, 16.

⁷⁷² Aldous notes that Walker was popular within the Conservative Party. Some were concerned as to whether he was the right man for the job, but they had judged him too

conserve rural and urban areas, ensuring that things beautiful and good survived across the country. 773 This shows a commitment to environmental issues from the government, and also reflects the growing environmental awareness within society.

Three years later, in 1973, the government launched a national campaign. 'Plant a Tree in '73.' 'The Year of the Tree,' as 1973 was also known, was designated at the insistence of Conservative MP Sydney Chapman. Whilst a tree planting year had been suggested previously in Parliament, it was only with the Department of the Environment's creation that this was made possible. 774 Partly as a response to the loss of woodland from Dutch elm disease, it also sought to encourage a programme of widespread tree planting and demonstrate that 'trees well sited can be a most effective way of making town and countryside more beautiful and pleasanter to live in,' ultimately inspiring volunteers to plant trees in urban areas where they were most needed. 775 Many amenity and business groups were also supportive, and members of the public and school children were supported in plating trees. Some trees were also planted as part of 'Operation'

quickly - he was a hard worker and he set out 'to master thoroughly and successfully whatever brief he is set, whether unit trust or pollution control. He does so the more gladly if he thinks he is on to a winner - and in the battle for the environment he has detected a

winner' – see *Ibid*, pp. 27-28.

773 *Ibid*, pp. 38-39.

774 See Mr Oakes, House of Commons Debate, 'National Tree Planting Year', 4 July 1967, vol 749 cc221-2W -

http://hansard.millbanksystems.com/written answers/1967/jul/04/national-tree-planting-<u>year#S5CV0749P0_19670704_CWA_108</u> – accessed electronically 30 March 2014. Anon, '1973 to be "Plant a tree" year', *Glasgow Herald*, 2 March 1972, p. 2. See House

of Commons Debate, 'Tree Planting Year', 24 November 1971, vol 826 cc1315-6 http://hansard.millbanksystems.com/commons/1971/nov/24/tree-plantingyear#S5CV0826P0_19711124_HOC_35 - accessed electronically 12 December 2012; House of Commons Debate, 'National Tree Planting Year', 1 March 1972, vol 832 cc400-1 http://hansard.millbanksystems.com/commons/1972/mar/01/national-tree-planting-year accessed electronically 12 December 2012; House of Commons Debate, 'Tree-Planting Year', 8 May 1972, vol 836 c272W -

http://hansard.millbanksystems.com/written_answers/1972/may/08/tree-planting-year accessed electronically 12 December 2012; 'Tree Planting Year - Oral Answers to Questions: Agriculture, Fisheries & Food' -

http://www.theyworkforyou.com/debates/?id=1973-12-20a.1593.2 - accessed electronically 12 December 2012.

Evesore' which sought the reclamation of derelict land. 776 Recognising the importance of 'encouraging interest in trees among young people,' the Department of the Environment and the Forestry Commission worked with local authorities to encourage schools to take part in the campaign. 777 'Plant a Tree in '73' left a lasting legacy, with the creation of the Tree Council which established National Tree Week in the years following the campaign, a promotion which is still celebrated annually. The significance of planting trees, a simple act in itself, should not be downplayed. In the recent BBC series Africa, the final episode, 'The Future,' noted the awareness of Africans to planting trees and the benefits that planting them brings. 778 As Sydney Chapman commented in 1972, 'Trees are not just beautiful objects in themselves. One can use trees to cover up industrial eyesores, one can use trees to cover waste and derelict land and ... one can use trees as a valuable sound battle between the motor vehicle ... and the pedestrian.'779 Continuing he described how the 'British people' were becoming increasingly aware of their local environment and communities within which they lived. Previously 'they were prepared to pay the price of the belching factory because it meant jobs ... Now, however, the public ... realise that they can still have their jobs yet the factory chimney need no longer belch.'780

The Department of the Environment, which spearheaded Chapman's idea. produced a million posters, stickers and badges for the campaign. Geoffrey

⁷⁷⁶ See Geoffrey Ripon, House of Commons Debate, 'Tree Planting Year', 19 December 1973, vol 866 cc310-1W -

http://hansard.millbanksystems.com/written_answers/1973/dec/19/tree-planting-

<u>year#S5CV0866P0_19731219_CWA_34</u> – accessed electronically 30 March 2014.

The second http://hansard.millbanksystems.com/written_answers/1972/aug/03/tree-plantingyear#S5CV0842P0_19720803_CWA_41 – accessed electronically 30 March 2014.

778 BBC Series, *Africa*, Episode 6 'The Future', first aired Wednesday 6 February 2013.

⁷⁷⁹ Sydney Chapman, House of Commons Debate, 'Environmental Pollution', 25 October 1972. vol 843 cc1295-324 -

http://hansard.millbanksystems.com/commons/1972/oct/25/environmentalpollution#S5CV0843P0_19721025_HOC_477 – accessed electronically 30 March 2014. 780 lbid.

Rippon, the Secretary of State for the Environment at that time, launched the campaign by planting a cherry tree outside his departmental headquarters in Westminster. This was 'a symbolic attack on the "concrete jungle," claiming that if done in the right places, planting trees 'would make a fairly immediate impact on the environment.⁷⁸¹ Milton Keynes Development Council even intended to plant over a million trees over 17 years following 1973, with tens of thousands earmarked to be planted during 'Plant a Tree' year. 782 Nationally, the campaign proved to be a success with 1.5 million trees planted during the year. 783 To celebrate, the Royal Mail issued a special nine pence stamp, and the heightened interest in forests and woodland protection caused the Forestry Commission to encourage more people to visit forests and National Parks. 784 At the Clean Air exhibitions in the 1950s, attendees were shown the effect of pollution on trees. The planting of trees in urban areas is also symbolic of this – the bringing of the countryside into the city as was done at those exhibitions. This reflects some of the issues discussed here and the place trees have within environmental discourse.

This issue of the 'concrete jungle' also fed into the wider concerns about motor vehicles and was something which many of the newly emerging environmental pressure groups opposed. In 1972, Newcastle City Council cut down between 300 and 500 trees to make way for an urban motorway. In response, SOC'EM, who viewed motorway construction as expanding this concrete jungle, uprooted a tree, which they called 'Arthur,' and carried it to the

⁷⁸¹ Rippon is quoted in Anon, 'Mr Rippon opens the Year of the Tree', *The Times*, Thursday 4 January 1973, p. 4.

⁷⁸² E. Maxwell, Letter to the Editor, 'A tree for 73', *The Times*, Tuesday 23 January 1973, p.

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&</sup>lt;sup>783</sup> Anon, 'More power given to protect trees', *The Times*, Thursday 28 March 1974, p. 4.

⁷⁸⁴ Ronald Faux, 'Persuading the public that forest walks are rewarding', *The Times*, Wednesday 6 September 1972, p. 17.

⁷⁸⁵ Aldous, *Battle for the Environment*, p. 44.

steps of the Civic Centre. On Arthur they placed a sign which read "SOC'EM LOVES ARTHUR: ONE OF THE 500." SOC'EM, therefore, were not just a NIMBY group, opposing the development of urban motorways (see below) but reflected wider issues concerning industrial development encroaching on towns and cities which became the focus of national attention with the 'Plant a Tree in '73' campaign as well as concern about the effect of air pollution on human health and the environment. SOC'EM provides an example of the sentiments at the time within some circles about industrial development and, unlike some other similar NIMBY groups, it had international connections. The group's mission statement specifically claims that they supported 'new development which is in harmony with the character of the city. ... [and wanted] more trees and open space' and that SOC'EM was 'an action group devoted to the betterment of Newcastle upon Tyne as an historic, living city.'

United Nations (UN) Conference on the Human Environment, Stockholm 1972

As testimony to the influences on the 1970s movement, the first ever UN Conference on the Human Environment, held in Stockholm, in 1972, included much of what has been discussed here in previous chapters. Originally planned since 1968 when the UN had 'discovered the "environment," the conference represented another level of the growth of an environmental consciousness. The events of the 1950s and 1960s had triggered 'an "environment explosion." ⁷⁸⁹

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⁷⁸⁶ As quoted in Alan Brown, 'Its more than just trees...[sic]', *Muther Grumble*, Issue 5, May 1972 –

<u>http://www.muthergrumble.co.uk/issue05/mg0502.htm</u> – accessed electronically 12 December 2012.

Conservation – The Conservation Society Newsletter, no. 48, January 1974, p. 12 in MD8037 Acc. 1999/63, SCA.

⁷⁸⁸ 'SOC'EM! Mission Statement', TWA.

⁷⁸⁹ As quoted in Stanley Johnson, 'International control of the pollution explosion', *The Times*, Thursday 12 August 1971, p. 12.

In the run-up to this Conference, Environment Secretary Walker established four working parties. One dealt with pollution, one with the human habitat and one with natural resources. The fourth, innovative and forward thinking, dealt with the role of young people in improving and protecting the environment. It was chaired by a 25 year old. 790 Also in anticipation to Stockholm, FoE in Britain produced a guide, detailing some of the historic issues which have blighted the environment (some of which were included as case studies in Chapters 2-4 of this thesis) and how society can change them. As seen in their concluding statement, they were both aware of an environmental consciousness which had grown but also that there was much still to achieve:

Already, public concern is starting to influence governments: the Conference, proposed in 1968 to help arouse public concern, is now far behind the concern that has sprung up in many countries, and the delegates must now catch up. After the Conference, your country's delegates might try to sit back and commend themselves for having solved the world's problems. Don't let them! They've only just begun. Even stronger help and advice for your government, backed by your work and your sweat, can help the good parts of the system beat the bad parts in time, in steps that are orderly, swift, and just. There is no special place you have to go to work for the earth: the earth and its problems are all around you, and they are all that there is. There is only one earth, a last planet, and there is no spare. 791

The conference was 'probably among the most successful international conferences ever held. ... [because] As Keith Caldwell explains "it legitimised environmental policy as a universal concern among nations, and so created a place for environmental issues on many national agendas where they had been previously unrecognised." 1792 It reacted to the shifting image of mankind's relationship to the earth, which moved from dominance to a more equal relationship; in doing so, this reflected a new understanding of environmental

⁷⁹⁰ Aldous, *Battle for the Environment*, p. 36.

⁷⁹¹ Friends of the Earth, *The Stockholm Conference: Only One Earth* (London: Earth Island Limited, 1972), p. 168.

792 As quoted in Nicholson, *The New Environmental Age*, p. 110.

issues (and the progression from conservationism towards environmentalism) which occurred in the late 1960s with the Conservation Society. As FoE noted, there were some areas, such as pollution, that 'the public were already suitably informed [about it] and articulate to deal with it' (again, hinting at an environmental consciousness existing before the 1970s). 793 A longer legacy of the conference was that it founded the UN Environmental Programme. 794 Whilst some within UN circles expressed concern at a possible conflict of interest between environmental and economic issues, many viewed these as 'not necessarily mutually exclusive.'795 Indeed the Conference provided examples of the inclusivity of environmentalism, highlighting a positive relationship between protecting the environment and economic growth. 796

In 1971, the Conservation Society issued a booklet describing the upcoming conference which argued that:

The main problems of the environment do not arise from temporary and accidental malfunctions of existing economic and social systems. On the contrary, they are the warning signs of a profound incompatibility between deeply rooted beliefs in continuous growth and the dawning recognition of the earth as a space ship, limited in its resources and vulnerable to thoughtless mishandling. ... The Conference in 1972 will provide an opportunity to initiate action on the right lines, and its importance cannot be over-estimated. 797

In addition it also highlighted the importance of the conference, as it was the first time world leaders had met collectively to discuss environmental issues. The conference also offered recognition that the environment was important and its

⁷⁹³ Friends of the Earth, *The Stockholm Conference*, p. 168; See also Nicholson, *The New* Environmental Age, pp. 111-112.

794 Nicholson, *The New Environmental Age*, pp. 111-112.

⁷⁹⁵ Report on the proceedings of the twenty-fifth session of the General Assembly of the United Nations, 17 December 1970 (Cmnd. 4674), p. 62.

Leaflet 'UN Conference on the Human Environment 1972 – Memorandum from the Conservation Society to the Secretary of State for the Environment' (1971), p. 3, G.39, Papers of Sir Peter Scott, G0012, CUL.

protection paramount, as well as underlining the vulnerability of the natural world whose fate was in the hands of humans.⁷⁹⁸

Whilst dealing with the broad issues and global themes, UN Secretary General Maurice Strong (described as 'an activist' in *The Times*) wanted the bulk of the conference to be concerned with specific action proposals for consideration by the governments attending. The Conference had four main aims: 'to alert public opinion to the importance and urgency of environmental problems': to determine which problems could be solved through international collaboration; to develop better methods of tackling these issues in both the national and international arena; and to encourage international organisations to play a more significant role in tackling environmental problems, such as pollution. 799 Essentially, the Conference sought to 'make an evaluation of the present state of the environment and ... to spawn new international agreements to curb pollution of the atmosphere and the oceans.⁸⁰⁰ As Bolton East MP Laurence Reed noted, the Conference would not immediately revolutionise the world. Instead it was a framework and structure from which governments could observe and evaluate the main environmental issues affecting the world and work towards solving them. 801 The first aim of it, Reed claimed, had actually already been solved in Britain, at least. Because of the growing environmental consciousness over the previous decades, by 1972 far more people were aware of environmental problems, with the preparations for it feeding into that. 802

⁷⁹⁸ *Ibid*, p. 7.

⁷⁹⁹ Laurence Reed, House of Commons Debate, 'Environment (Stockholm Conference)', 22 December 1971, vol 828 cc1595-608 –

http://hansard.millbanksystems.com/commons/1971/dec/22/environment-stockholm-conference#S5CV0828P0 19711222 HOC 285 – accessed electronically 1 April 2014.
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Johnson, 'International control of the pollution explosion', p. 12.

⁸⁰² Laurence Reed, House of Commons Debate, 'Environment (Stockholm Conference)', 22 December 1971, vol 828 cc1595-608 –

Strong persuaded the less developed countries that environmental issues were not just those of pollution from industries. The problem of overgrazing, the contamination of water supplies, rapid urbanisation were some of the other issues that affected the environment and that were in turn affected by the environment (that is, issues which had affected Britain pre-1972). The Conference ended having achieved 'virtually all of its stated aims in 11 days.' It concluded with the Stockholm Declaration which stated that, 'The Conference calls upon Governments and peoples to exert common efforts for the preservation and improvement of the human environment, for the benefit of all the people and for their posterity.'

The importance of it was that the Conference 'represented a first taking stock of the global human impact on the environment, an attempt at forging a basic common outlook on how to address the challenge of preserving and enhancing the human environment.'805 It internationalised environmentalism in a way that had not happened before. The concept of a national environment, Eldon Griffiths claimed in Parliament, no longer existed. Everyone was affected by environmental problems and was the reason why the UN Conference was so important.⁸⁰⁶ In addition to this, it dealt with many of the problems which had been highlighted in the previous 25 years in Britain; problems such as air, water, and ground pollution;

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http://hansard.millbanksystems.com/commons/1971/dec/22/environment-stockholm-conference#S5CV0828P0_19711222_HOC_285_ – accessed electronically 1 April 2014.

803 Anon, 'UN parley gives plan for earth', *Boston Globe*, 18 June 1972, p. 7; See Anon, 'UN

Anon, 'UN parley gives plan for earth', *Boston Globe*, 18 June 1972, p. 7; See Anon, 'UN sets up programmes on ecology', *Boston Globe*, 17 December 1972, p. 52.

804 See

http://www.unep.org/Documents.Multilingual/Default.asp?documentid=97&articleid=1503 – accessed electronically 23 October 2012.

⁸⁰⁵ Günther Handl, 'Declaration of the UN Conference on the Human Environment' – http://untreaty.un.org/cod/avl/ha/dunche/dunche.html – accessed electronically 23 October 2012. See also – http://www.unep.org/Documents.Multilingual/Default.asp?DocumentID=97 – accessed electronically 23 October 2012.

accessed electronically 23 October 2012.
 Eldon Griffiths, House of Commons Debate, 'Environment (Stockholm Conference)', 22 December 1971, vol 828 cc 1595-608 –

http://hansard.millbanksystems.com/commons/1971/dec/22/environment-stockholm-conference#S5CV0828P0_19711222_HOC_287_ - accessed electronically 1 April 2014.

waste; conservation; and industrial growth. It was also symptomatic of the new 'broad networks' used to define the environmental movement; as environmentalism gained an international dimension, it allowed for new networks to be formed amongst pressure groups and other bodies, thus stimulating the movement to properly appear.

To understand the attitude to environmental issues in the 1970s, in a debate in the House of Lords in the run-up to the Conference, litter was mentioned:

Consider a small plastic package. You throw it away. If you live in London, it is collected by the borough council but it is disposed of by the Greater London Council—very likely into the North Sea. If so, it will come under the North Sea dumping convention negotiated by the United Kingdom Government with other Governments. Of course, it may float northwards round the corner into the Atlantic, where there is not yet (though there will have to be) a world convention on dumping negotiated by all the Governments of the world. Add to this that this plastic package might not have been sold to you in the first place if the Chancellor of the Exchequer had taxed it; and one sees that this is one of those fields where if you think of anything you must think of everything.⁸⁰⁷

This was, Lord Kennett argued, 'exactly what the Stockholm Conference' was about. 808 Whilst in the 1950s the narrative might have been made that this small plastic package would end up in the sea, now the public and politicians saw how this small plastic package did not just end up in the North Sea but it had a wider effect, and it was not just something that affected Britain but other countries also.

It is important to place this event within a history of post-war environmental consciousness as it was the first time an international gathering with representatives from countries around the world, had been held. Moreover the Conference represents how far the environment had risen in public consciousness

 $^{^{807}}$ Lord Kennet, House of Lords Debate, 'The Human Environment: Stockholm Conference', 20 April 1972, vol 330 cc191-268 -

http://hansard.millbanksystems.com/lords/1972/apr/20/the-human-environment-stockholm#S5LV0330P0_19720420_HOL_59 – accessed electronically 30 March 2014. 808 Ibid.

since the end of the Second World War, and shows how the 1970s in particular pushed forward with the environmental agenda. It is included here because it is evidence of the development of a more inclusive and international environmental awareness. Pressure groups like FoE, 'achieved enormous publicity and became a fixed feature of environmental politics in Britain' as a result of their response to the Conference. 809 Essentially it signalled the appearance of a new form of environmentalism, one which stressed the connections between the natural world and humans. This was epitomised in 1972 when 'A Blueprint for Survival' was published in Britain.810

'A Blueprint for Survival', Limits to Growth

As the central hypothesis of this thesis seeks to show, the environmental awareness of the previous 25 years in Britain came to a head in the 1970s, with a shift in the zeitgeist of environmental ideas from singular issues to more inclusive concerns. This can all be seen in one publication, 'A Blueprint for Survival', which originally appeared as a special edition of *The Ecologist* magazine in January 1972. In terms of its context and responses, as well as how far-reaching it was, 'Blueprint' could be considered to be a British Silent Spring. In terms of writing style, it was not a direct descendent of Silent Spring. Carson's work was more eloquently written than that which appeared in *The Ecologist*. Yet in terms of content, 'Blueprint' described much of what has been covered in previous chapters. It included discussion of air pollution and the increasing use of smokeless fuels in cities including London and Sheffield; it mentioned littering and the dumping of waste in the countryside; it commented on 'the pollution of freshwater,' the use of chemical pesticides such as DDT, and the need for

Lent, British Social Movements Since 1945, pp. 101-102.
 Turner, Crisis? What Crisis?, p. 57.

conserving the natural environment. 811 In other words, it brought together all the environmental problems described within this thesis, into one main argument about the state of the planet, then offered solutions to it. It also developed ideas which the Conservation Society had been propagating, criticising economic structures and the nature of society. If the British reception of both 'Blueprint' and *Silent Spring* are compared, then it seems that 'Blueprint' had a more immediate, direct impact. As Carson's work divided opinion, so too did 'Blueprint', with the media largely in praise of it, whilst some commentators were against it. In addition, as *Silent Spring* had advanced previews in *The New Yorker*, during the summer preceding the book's publication, equally the success of *The Ecologist's* special edition led to it being published as a manuscript. This text, therefore, increased an environmental consciousness in Britain.

To understand some of the responses to the work, Michael Allaby, who worked at *The Ecologist* and was a co-author of 'Blueprint,' has claimed that the book 'became very big for a while.' ⁸¹² After it sold out as a special edition of *The Ecologist*, it was reproduced as a book, selling 75,000 copies in Britain, and was translated into 16 different languages. ⁸¹³ BBC producer Barry Letts had read 'Blueprint' and was concerned about the fate of the world. He was so influenced that he decided to base a *Doctor Who* story on some of the themes the book raised and thus 'The Green Death' was born (see below for more on this). The story's writer, Robert Sloman was similarly affected by reading the book. ⁸¹⁴ Whilst some criticised the arguments made in 'Blueprint,' the media overwhelmingly

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⁸¹¹ Goldsmith et al, 'Blueprint', pp. 9-10.

⁸¹² Interview with Michael Allaby, April 2012.

Dolly Jorgensen, 'A Blueprint for destruction: eco-activism in *Doctor Who* during the 1970s', *Ecozona*, Vol. 3 no. 2 (2012), p. 11.

⁸¹⁴ See DVD Special Features 'The One with the Maggots' and 'Robert Sloman Interview' on *Doctor Who* – 'The Green Death' DVD.

supported it. Leading supporters included Julian Huxley and Peter Scott. As both men were influential people in post-war conservation issues it is therefore significant they supported this work. Fraser Darling even went so far as to describe 'Blueprint' as the "sanest statement on the pollution problem" he had seen. He had seen with the supporting it, this provides a further link with the nature conservation issues of the 1940s and 1950s. When asked in Parliament whether the government was aware of *The Ecologist*'s special issue, the response by the Prime Minister was that preparations were being made 'for the important issues raised that this article to be studied both within and outside Government' and that 'Much relevant work' was already being completed. He had seen.

'Blueprint' advocated the radical restructuring of society to prevent what the authors described as 'the breakdown of society and the irreversible disruption of the life-support systems on this planet.'818 It also suggested that small, decentralised and de-industrialised communities were environmentally, politically and socially much better than large, centralised and industrialised ones, as it was difficult to enforce behaviour of individuals in larger groups; business practices were more environmentally friendly in smaller units than larger ones; people felt more fulfilled in smaller communities; and a reduction in the population of a specific area would reduce the environmental impact of that area. Tribal societies were used as role models, as they characterised small communities which used low-impact technologies and had sustainable population levels.⁸¹⁹ 'Blueprint' was

⁸¹⁵ Frank Fraser Darling is quoted in Arthur Smith, 'A Blueprint for Survival', *Daily Mirror*, Friday 14 January 1972, p. 4.

⁸¹⁶ *Ibid.* See also 'Sir Frank Moss Fraser Darling (1903-1979), *ecologist*' by Kenneth Mellanby, rev. V. M. Quirke – http://www.oxforddnb.com/view/article/30999 – *Oxford Dictionary of National Biography*, accessed electronically 7 November 2013.

House of Commons Debate, 'Blueprint for Survival', 14 March 1972, vol 833 c85W – http://hansard.millbanksystems.com/written_answers/1972/mar/14/blueprint-for-survival#S5CV0833P0 19720314 CWA 245 – accessed electronically 1 April 2014.

818 Edward Goldsmith et al, 'Blueprint', p. 1.

⁸¹⁹ *Ibid*, pp. 15-17, 20-22, 32-34.

described as the 'most far-seeking revolutionary alternative to our society' which was supported by many scientists 'who could never be impetuous or paranoid; except by megalomaniacs and industrial barons frightened of any challenge to their rule.'

Not long after *The Ecologist* published their special edition, the Club of Rome, a group of industrialists, economists and statespersons, brought together to discuss world problems, published *Limits to Growth*. This book was said to be 'pretty shattering' and that when reading it, each time 'you think you have caught the investigators out, they prove that they have taken notice of the faults you have found.' The book was aimed, a review states, 'at finding out what the limits are: what controls those limits ... how these factors interact.'821 The Club of Rome ran computer simulations about different levels of growth and investigated what would happen if there was an adverse influence on growth, for example a spike in population growth or the reduction of natural resources. Most of the simulation results predicted catastrophe in the future, and with both *Limits* and 'Blueprint' appearing at the same time and having similar messages, their impact was doubled. One supported the other.

The Times described Limits as something not unfamiliar to cinema goers in its plot, and could be described as the "Computer that Predicted the End of the World." Francis Arnold, *The Times*'s reviewer of *Limits* stated the 'depressing thing is that the crisis the computer describes is a very real one, but that by turning it into numbers that have at best a tenuous connection with reality, the

⁸²⁰ Alan, 'A Blueprint for Survival', *Muther Grumble*, Issue 3, March 1972 – http://www.muthergrumble.co.uk/issue03/mg0326.htm – accessed electronically 26 November 2012.

Maurice, 'The Limits to Growth', *Muther Grumble*, Issue 5, May 1972 – http://www.muthergrumble.co.uk/issue05/mg0510.htm – accessed electronically 26 November 2012.

⁸²² This quote appears in Francis Arnold, 'The compassionate computer', *The Times*, Saturday 1 April 1972, p. 14.

programmers have been influenced more by the limits of computation than those of the real world.'823

To some, both 'Blueprint' and *Limits* were nothing more than scaremongering. Wilfred Beckerman, Professor of Political Economy at Oxford, claimed the human race was in no danger of the ecological catastrophe which both works described and there was no reason to think that economic growth would lead to one. He described how in both books there was 'a tissue of schoolboy howlers of logic and fact cloaked in portentous, but specious, computerised models.'824 About *Limits* in particular he asserted that it was 'a brazen, impudent piece of nonsense' and that scientists who endorsed 'Blueprint' "must have taken it in turns to write each sentence, like a game of 'Consequences' ... [it being] difficult to find two logically consistent sentences in sequence."

However Environment Secretary Peter Walker took the concerns raised by these works seriously. Although the editor of *Nature* John Maddox dismissed the points raised by these works as 'exaggerated "doom and gloom" stuff,' Walker did not. Pollution was a serious issue, he acknowledged, and if he could 'make every citizen environment-conscious' and encourage them to act upon it, he would. The government invited the authors of 'Blueprint' to Westminster to discuss their findings. 'Blueprint' made 'Westminster people' sit up and take note. Concern about the environment 'for presentational reasons at the very least, became a regular factor in government decisions' in part as a result of the publication, and in part because of the changing landscape of environmental ideas by the early

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⁸²³ *Ibid.*

⁸²⁴ Wilfred Beckerman is quoted in Peter Jay, 'Flaws in ecodoomsters' arguments', *The Times*, Wednesday 31 May 1972, p. 14.

⁸²⁵ *Ibid*.

⁸²⁶ *Ibid*.

1970s, precipitated through the previous 25 years as described in the previous chapters.⁸²⁷

'Blueprint' was drawn up partially to solve the 'extreme gravity of the global situation today'; because governments (including the British) were refusing to acknowledge or playing down the important facts of environmental degradation; and also to complement the Club of Rome's work in *Limits*. When initially published, 'Blueprint' was linked to the television series *Doomwatch* (below), with the *Daily Mirror* reviewing the publication and claiming that a 'Doomwatch movement should be set up to guard against pollution and over-population, a group of leading scientists urge today.'829

Both 'Blueprint' and *Limits* are important to consider here because not only were they best-sellers and well-known at the time, but also because they represented an amalgamation and evolution of ideas which have been discussed in previous chapters of this thesis. Many of those interviewed for this project commented on both works and how they were influenced by or interested in the arguments made in them. Furthermore, both works represented a very real fear in the early 1970s of impending environmental catastrophe.

Through one of its co-authors, John Davoll, 'Blueprint' links with the Conservation Society (Davoll was Chair of the Society in the early 1970s). It was almost a philosophy of the Society and detailed much of what they advocated. In addition, 'Blueprint' 'gave rise to political parties in New Zealand, Tasmania, and in Alsace.' In so far as its influence is concerned, therefore, 'Blueprint' had more

⁸²⁸ Goldsmith et al, 'Blueprint', p. 1; see also Gareth Parry, 'Life or death choice: "It's up to us", *Daily Express*, Friday 14 January 1972, p. 7.

⁸²⁹ Arthur Smith, 'A Blueprint for Survival', *Daily Mirror*, Friday 14 January 1972, p. 4.

Beckett, When the Lights Went Out, p. 37.

⁸³⁰ 'A Future for our children, an environment fit for PEOPLE', A Political Statement by PEOPLE, 1973, p. 3, from Professor Michael Benfield, a founding member of PEOPLE.

impact in Britain and, arguably, across the world than *Silent Spring*. Whilst *Silent Spring* has been described as the book that launched the modern environmental movement, green political parties did not begin to emerge in the political sphere until the beginning of the 1970s.

Several newspaper reports about 'Blueprint' even claimed that if necessary, a political party should be formed to save mankind from self-destruction. ⁸³¹ In Britain, this was achieved in 1973 with the launch of the ecological political party PEOPLE, which used 'Blueprint' as its 'basic theoretical statement.' ⁸³² For the beginning, PEOPLE concluded that only by 'adopting an integrated long-term programme on the lines of the Blueprint for Survival ... [can] a painless transition ... be ensured to a sustainable and satisfactory society.' ⁸³³

PEOPLE, Britain's first ecological political party

Whilst a study of political parties does not comprise a major strand of this thesis, it seems only right to mention Britain's first ecological political party, especially as it represents further the idea of the 1970s as 'the environmental decade.' The party still exists today (as the Green Party) which highlights how successful works like 'Blueprint' were in the consciousness of the nation. 'Blueprint' formed the basis of PEOPLE's first manifesto in 1974. It is clear the founders of PEOPLE were inspired by 'Blueprint' and the issues it dealt with. Furthermore in his definition of what constitutes the environmental movement, Christopher Rootes places the contemporary Green Party within this classification, and does so deliberately. Whilst the party was somewhat different in 1973 to how it is today, PEOPLE

See Parry, 'Life or death choice', p. 7; Smith, 'A Blueprint for Survival', p. 4; Anthony Tucker, 'Disaster-mongers "cause for alarm", *The Guardian*, Friday 14 January 1972, p. 8.
 'A Future for our children, an environment fit for PEOPLE', p. 3, from Professor Michael Benfield, a founding member of PEOPLE.
 Ibid. p. 3.

advocated revolutionising the political process in Britain, putting forward environmental policies for the first time.

In 1972, a couple of newspaper articles were published, questioning whether either the Labour Party or the Conservative Party were progressive with regards environmental protection. These articles also queried whether Labour would pursue strong environmental politics in case it upset business leaders, and whilst praising the Conservatives for establishing the Department of the Environment, it noted that 'there is plenty of room for action in this field.' It was in this context that, in January 1973, PEOPLE, was launched.

Founded in Coventry by Tony and Lesley Whittaker, Michael Benfield and Freda Sanders, it fielded candidates in both the General Elections in 1974 (and became the Ecology Party in June 1975). PEOPLE viewed a gap in the political arena, describing themselves as 'the glue to the ... environmental movement and people dissatisfied with old-style politicians. It wanted to create a political force capable of being democratically elected to provide the necessary safeguards which everyone was entitled to.

A circular letter distributed at the party's conference in October 1974 states:

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Quote taken from Anon, 'Safeguarding the environment', *The Co-operative Newspaper*, 22 January 1972, newspaper cuttings, A.748, Papers of Sir Peter Scott, GB0012, CUL; Anon, 'Dr Ehrlich outlines blueprint for survival', *The Church of England newspaper*, 21 January 1972, newspaper cuttings, A.748, Papers of Sir Peter Scott, GB0012, CUL.

See Wolfgang Rüdig & Philip D. Lowe, 'The Withered "Greening" of British Politics: a study of the Ecology Party', *Political Studies*, 34:2 (1986), pp. 262-284; See also 'When? What? Why? Where? How?' The Ecology Party leaflet, n.d. likely to be 1975, from Professor Michael Benfield, a founding member of PEOPLE. See 'Global Green Party History – Chronology 1973' – http://www.globalgreens.org/history/chronology/1973 – accessed electronically 2 January 2013; 'Green History' – http://another-green-world.blogspot.co.uk/2006/10/green-party-hist-ch1-pt-2.html – accessed electronically 2 January 2013; Obituary – Teddy Goldsmith –

http://www.greenworld.org.uk/page17/page17.html – accessed electronically 2 January 2013. See Dennis Johnson, 'Survival platform for new party', *The Guardian*, 4 February 1974, p. 7.

⁸³⁶ PEOPLE leaflet, 1973, from Professor Michael Benfield, a founding member of PEOPLE. ⁸³⁷ *Ibid.*

PEOPLE is a catalyst drawing together like minds from the whole spectrum of concerned opinion, creating a new will within the nation. ...PEOPLE strives for a new impartial force in human affairs free to examine and fearless to re-direct our course as necessary. Can we any longer rely on politicians – who repeatedly fail to recognise root causes of unrest and disillusion?⁸³⁸

Its name comes from the party's emphasis on participatory democracy (it represented all people standing and being active in politics), as well as the interest in population politics of one of its founders, Michael Benfield.⁸³⁹

Why was a new political party needed? In the previous chapters, it was argued that some sections of the government were environmentally-aware and acted in environmentally-friendly ways. Even in the first three years of the 1970s, much had already happened in society regarding the environment – the new Department of the Environment (DoE), the ECY, the UN Conference in 1972 and the television series *Doomwatch* (see below). The environment had shifted to the centre of British consciousness. Yet some doubted the mainstream political parties were actually embracing an environmental agenda. The DoE, for instance, was criticised by a founder of the Conservation Society, Douglas MacEwan, who described it as the Department for the Destruction of the Environment, arguing they were selective in when and where they chose to intervene and that it was a political sop to a popular idea.⁸⁴⁰

PEOPLE's appearance does therefore reveal a growing environmental consciousness in society. The party actually produced a leaflet to explain their existence. There are:

So-called ecological groups in many political parties and their aim is to bring about change from within these parties. Their effectiveness is questionable.

⁸³⁸ Liverpool Conference circular letter October 1974, from Professor Michael Benfield, a founding member of PEOPLE.

⁸³⁹ Colin Fry, 'Facts About the Ecology Party', 1976, p. 1, from Professor Michael Benfield, a founding member of PEOPLE.

⁸⁴⁰ MacEwan, 'Some Recollections', SCA.

All these parties need economic growth to support their policies and it is too much to expect that any of them can adapt their philosophies to a steady state economy, which is needed to meet ecological constraints, without losing completely their present identity and most of their popular support. ... The only way that long-term change can be brought about is by an independent ecological political party which can: offer Britain a clear alternative solution to her troubles AND will challenge other politicians in debate and at elections. 841

The party, it concludes, can do all this. Like the Conservation Society, and 'Blueprint,' PEOPLE viewed zero growth as the answer to society's problems. This set them apart from traditional political parties. PEOPLE also offered a radically new approach to politics. It was a different political party as it was the only one which was committed to an overall economic strategy based on self-sufficiency and minimal growth; it was different because not only did it preach devolution, it practiced it as well, having an informal structure. It was the only party which was truly environmentalist at heart. Essentially, then, the mainstream political parties offered environmental ideas and stressed economic growth, whereas PEOPLE and its supporters argued that this was not possible, and advocated zero growth strategies.

Politically, however, PEOPLE was unsuccessful. Within the timeframe of this project, PEOPLE failed to get any candidate elected in a general election, although in 1976, it did win seats in two local elections, one on Rother District Council in Sussex and the other for Kempsey Parish Council in Worcestershire. 843

Yet in fielding seven candidates in the general election of February 1974, some of

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^{841 &#}x27;When? What? Why? Where? How?'.

⁸⁴² *Ibid.*

⁸⁴³ Colin Fry, 'Facts About the Ecology Party', 1976, p. 1, from Professor Michael Benfield, a founding member of PEOPLE. John McCormick, who has written on the global environmental movement, has been of use in this study. However when discussing PEOPLE/The Ecology Party, he has also offered incorrect statements about the party's electoral success: In a list of different green political parties, he mentions the British Ecology Party and claims that the party 'Won its first local council seat in Cornwall in 1981' when as noted above, their first electoral victory was in 1976. See McCormick, *The Global Environmental Movement*, p. 140.

these beat independents and Communists – who represented a far larger and older party – and polled in third place. 844 In addition, the very fact of their existence reflects the growth of environmental ideas over the previous three years, not to mention the longer development of an environmental awareness since the end of the war. PEOPLE formed broad networks with different organisations and groups. working closely with the Conservation Society. After 12 months, 40 PEOPLE groups existed 'from Cornwall to Caithness' and a popular information pack was produced 'How to Run a PEOPLE Group' which became known as 'the PEOPLE Pack.'845

They used tactics which were imitated from others, drawing on some of the issues Carson raised in Silent Spring (whilst canvasing, supporters used soil samples to show potential voters the effects of chemicals on soil). 846 The party also advocated supporters becoming active. An advert in *The Ecologist* suggests that supporters of PEOPLE should 'Join with other likeminded people throughout the country who like you want to avoid the stale atmosphere of discussion groups and find a live, active outlet for your energies and beliefs.'847 Whilst politically, PEOPLE failed to get any candidates elected, their presence in the political arena forced the other main political parties to develop their own policies and reassess their commitment to environmental issues. PEOPLE received many letters of support from across the country from people saying how much they were pleased a new political party had appeared to challenge the perceived wisdom of the main

⁸⁴⁴ PEOPLE Newsletter 1, February 1974, from Professor Michael Benfield, a founding member of PEOPLE. Anon, 'Seven for the People', newspaper cutting, MSS.50X/4/2, MRC.

Email correspondence with Lesley Whittaker, January 2013.

846 Anon, 'Now soil enters the campaign', newspaper cutting, MSS.50X/4/2, MRC; Noel Newsome, 'These are the issues [letter]', *Coventry Evening Telegraph*, n.d. (sometime in January or February 1974), MSS.50X/4/2, MRC. ⁸⁴⁷ Back Cover, *The Ecologist*, 4:6 (July 1974).

political players.⁸⁴⁸ When 'Blueprint' was first published, it sought to launch a 'Movement for Survival,' with the aim of influencing governments into making a more sustainable society. It was supported by organisations including the Conservation Society and FoE. Yet this Movement came to nothing. It became subsumed into PEOPLE and the work they did. The Movement ceased to exist before it even really got going.⁸⁴⁹ Through its aim to influence governments, however, PEOPLE were able to do this, forcing the other political parties to raise their games with regards environmental issues.

When PEOPLE first appeared, they were accused of being 'doomwatchers.' This term 'doomwatcher' became part of the discourse of the environmental movement in Britain from 1970 onwards, often being used by critics of the environmental movement. It appeared after the BBC aired a successful and very popular drama series *Doomwatch*.

Doomwatch, Doctor Who and science fiction

Doomwatch, like 'A Blueprint for Survival,' covered issues which were prevalent in the 1940s, 1950s and 1960s. Indeed, it was a product of the 1960s, conceived at a time when Cow Green and the *Torrey Canyon* were causing people to reassess society's reliance on technology. The series was a direct response to that. It was almost a culmination of ideas which had grown over the previous 25 years. When the Conservation Society was founded in 1966, it was in part to make the public

MRC.

849 See 'The Movement for Survival' advert, *The Ecologist*, 2:1 (1972), p. 23. Brookes &

⁸⁴⁸ R. Watson, 'Survival [letter]', & Walter Neal, 'Real standards [letter]', newspaper cuttings, MSS.50X/4/2, MRC. Walter Neal, 'Ecology party [letter]', newspaper cutting, MSS.50X/4/2,

Richardson, 'The Environmental Lobby in Britain', p. 314.

⁸⁵⁰ PEOPLE Campaign Newsletter October 1974, from Professor Michael Benfield, a founding member of PEOPLE.

aware of "the unwise use of technology." This is precisely what Doomwatch did (and arguably more efficaciously than the Conservation Society did).

The television series revolved around a fictional Department for the Observation and Measurement for Scientific Work, its official task to protect the world from uncontrolled scientific research. It was really established as a body with little actual power, designed to fob off criticisms of the government not acting on environmental issues, and to win the green vote (there are some parallels here to how MacEwan viewed the DoE as). The Department was run by fictional scientist Dr Simon Quist, who had previously been involved in the Manhattan Project. Under Quist's leadership, however, the Department was actually quite strong and successful. In the first episode, Quist described *Doomwatch* as such:

Our proper name is 'Department of Measurement of Scientific Work'. But 'Doomwatch' is easier - and perhaps it's more correct, too. ... Our work's very important ... Science has given the world many good things - but science can also be dangerous. Sometimes scientists make mistakes; they can be careless. So the Government have started 'Doomwatch'. We're all scientists too, and we watch all the scientific work in Britain. If we're sure that the work is safe, we do nothing. But sometimes we find work that may be dangerous. And then we have to stop it.852

The first episode aired 9 February 1970, and was watched by an estimated 16.2 per cent of the United Kingdom population. The BBC's Audience Research Report for the first episode, entitled 'The Plastic Eaters,' described the series as having 'a very promising start' and was 'a change from the usual type of science fiction' with the story being 'believable and gripping.'853 The episode was also described by

⁸⁵¹ As quoted in Park, *History of the Conservation Movement in Britain*, p. 21.

⁸⁵² Doomwatch Manuscript, 'Doomwatch: The World in Danger', based on the television programmes by Kit Pedler and Gerry Davies, edited by Gordon Walsh, R43/999/1, WAC. This is a manuscript of three *Doomwatch* stories, including 'The Plastic Eaters', which were to be converted into book format for children to read. The quote by Quist appears on p. 6 of 'The Plastic Eaters'. The book was to form part of the Longman Structural Readers series Stage 4 – Non-Fiction, n.d. likely to be 1974/1975.

⁸⁵³ Doomwatch episode 'The Plastic Eaters', originally aired 9 February 1970, R9/7/103 – Audience Research Reports - Television - General Chronological January & February 1970, WAC.

some as being 'not so very improbable these days' and that the story was 'frighteningly possible.'854 This comment indicates how realistic some people found the series, and its significance, being scheduled at this time, should not be underestimated – the DoE had not yet been established. When *Doomwatch* first began, it was thought to be just another thriller series in the same tone as The Avengers, but very quickly proved to be something different. After just a few episodes, the series was 'widely recognised among ... British telly-watchers as a semi-documentary drama of ideas.'855 Using Audience Research Reports and written feedback from viewers is, as noted previously by Morley, the best way scholars can analyse the impact of a particular programme or series on society. 856 Therefore, the Audience Research Reports for *Doomwatch* are significant as they reveal what viewers thought about the programme.

As evidence of the importance of the anti-litter (or 'ground pollution') campaign of the 1950s, and how *Doomwatch* dealt with environmental ideas present in pre-1970s Britain, soon after the first episode had aired, representatives of the British plastics industry had complained to the BBC that the programme was spoiling the industry's image. However these industry figures also admitted that their real-life scientists were working on a similar virus to that portrayed in the episode, which the industry bosses hoped would solve the growing refuse problem.⁸⁵⁷ The virus was to eat through plastic, thereby removing the problem of litter.

The cult of the series did not emerge only from the programme's scientific plausibility but also politically, with The New York Times describing it as

⁸⁵⁵ Alan Brien, 'London: Of Man, Rats and the Absurd', *The New York Times*, 6 April 1970,

p. 48. Research Morley, 'Changing paradigms in audience studies', p. 24. Brien, 'London: Of Man, Rats and the Absurd', p. 48.

'exceptionally sophisticated for a mass entertainment drama' on a state-owned television network.858 The series, which ran over three seasons, achieved consistently high viewing figures and its name reflected the reality it represented. During the first year of broadcast, in 1970, Doomwatch averaged 9 million viewers. 859 After the first programme aired, some newspapers (such as the *Daily* Mirror) began running 'Doomwatch' columns, relating to any story concerning the environment which appeared during the programme's run. 860 In addition the word 'Doomwatch' became synonymous with anything destructive to the natural world. When this word – 'Doomwatch' – was used, however, there was no explanation as to what it was (often articles described 'Doomwatch style events' or advocated the establishment of a 'Doomwatch-style department'). The fact newspapers did not explain what they meant by 'Doomwatch' shows how significant the television programme was. The series had become so embedded in the British psyche no further explanation was needed. In a Times newspaper article from 1972, for instance, the term 'doomwatch dial' was used in reference to school children studying lichen as an indication of pollution levels.861

The word even appeared in the Oxford English Dictionary: 'DOOMWATCH – Observation intended to avert danger or destruction, esp. of the environment by pollution or nuclear war.' A search of Hansard with the word 'Doomwatch' shows its use only from 1970, and in connection with anything negative to do with

⁸⁵⁸ Ibid.

⁸⁵⁹ BBC Accounts and Annual Report, 1969-1970, (Cmnd. 4520), p. 59.

⁸⁶⁰ See Smith 'A Blueprint for Survival', *Daily Mirror*, Friday 14 January 1972, p. 4. *Blueprint* was discussed in this article and it mentions *Doomwatch*. Another section of the piece with a different headline – 'Goldfish keep guard on "drums of death". Both pieces are on a halfpage feature surrounded by a black box with white writing which read 'Doomwatch' ten times around the box – five at the top and five at the bottom.

Anon, 'Children to survey pollution', *The Times*, Monday 19 June 1972, p. 14.

Both Doomwatch episode 'The Plastic Eaters', originally aired 9 February 1970, R9/7/103 – Audience Research Reports, WAC; See Oxford English Dictionary entry for 'Doomwatch' – http://www.oed.com/view/Entry/56817?redirectedFrom=Doomwatch#eid – accessed electronically 12 July 2012.

the environment. 863 In comments which also show the importance Doomwatch wielded with some sections of society, Environment Secretary Walker was asked what he thought of the 'Doomwatch' approach to science. In response, he expressed his support for the 'Doomwatch' lobby, stating that if only there was a similar strong lobby in the United States, they would not be in the situation they were in, with lakes dying and pollution rampant. In Britain, he declared, if there had been 'a few good doomwatchers' 30 years previous, there may not have been the sort of problems that were present when he gave the interview, in 1972.864 In December 1971, MP Laurence Reed proposed that the government create a 'Doomwatch' agency. Known as 'Earthwatch,' this organisation 'would be a global agency watching over the state of the environment, monitoring it and surveying it '865

Stuart Hall has written on different ways television programmes can be interpreted. Hall's process of encoding and decoding can be used to analyse

⁸⁶³ Search: Doomwatch -

http://hansard.millbanksvstems.com/search/doomwatch?decade=1970s&page=1 accessed electronically 24 October 2012. In a debate about oil in 1977, one MP described another as a 'doomwatcher. ... [who] imagines that tomorrow ... oil will run out' – T.H.H. Skeet says this to Ronald Atkins, House of Commons Debate, 'Hydrocarbon Oil Etc.', 9 May 1977, vol 931 cc924-1018 -

http://hansard.millbanksystems.com/commons/1977/may/09/hydrocarbon-oiletc#S5CV0931P0 19770509 HOC 357 - accessed electronically 14 October 2013. In a debate about population in 1972, one MP said to the Prime Minister that he should not be influenced by people who are described as "doomwatchers" - Sir Gilbert Longden, House of Commons Debate, 'Population', 23 November 1972, vol 846 cc1515-6 http://hansard.millbanksystems.com/commons/1972/nov/23/population#S5CV0846P0 1972 1123 HOC 146 – accessed electronically 14 October 2013.

⁸⁶⁴ Interview between John Tusa and Peter Walker, 28 October 1971, in Schools Television: New Horizons – Science & Survival (Industry and the Environment) T69/36/1, Programme 3, Spring Term (File 2), WAC – transmitted 25/26 January 1972

Lord Kennet, House of Lords Debate, 'The Human Environment: Stockholm Conference', 20 April 1972, vol 330 cc191-268 -

http://hansard.millbanksystems.com/lords/1972/apr/20/the-human-environmentstockholm#S5LV0330P0 19720420 HOL 59 - accessed electronically 30 March 2014. See also Laurence Reed. House of Commons Debate, 'Environment (Stockholm Conference), 22 December 1971, vol 828 cc1595-608 -

http://hansard.millbanksystems.com/commons/1971/dec/22/environment-stockholmconference#S5CV0828P0_19711222_HOC_285 - accessed electronically 1 April 2014. See also Natural Environment Research Council Annual Report, 1973, p. 28.

Doomwatch. Ellen Seiter comments on the Hall model, notably that three are three ways in which the decoding of a programme occurs: through a dominant reading, where viewers accept the programme and the message as the producers originally intended (as in *Doomwatch*); through a negotiated reading, where the viewer interprets the message based on their own experience; and through an opposition reading, where viewers go against a preferred reading, such as a viewer recognising the political motivation of a news programme and commenting "There they go, up to their old tricks again!". Morley similarly notes these three decoding methods, and despite some criticism of Hall's approach, such as that it can be difficult to use this model on all genres, it nevertheless is useful when assessing television programmes as it does not claim that either a programme has a fixed meaning nor have no meaning at all. Context is always important in interpreting television programmes which is something Hall also signifies as central to this interpretation. Bes

One point Hall describes is that television programmes can be interpreted significantly differently by viewers (and by different viewers) than the writers/producers intended. He states often images used in programmes are interpreted as they should be, by the audience, because they 'look like objects in the real world' and they 'reproduce the conditions of perception in the receiver [viewer].'869 This can be applied to *Doomwatch*. Rather than projecting a particular image (photograph or drawing) which viewers would recognise, the producers of the series portrayed a set of events and disasters which reflected the real world. This was not lost on the audience, with Audience Research Reports claiming that

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⁸⁶⁹ Hall, 'Encoding and Decoding in the Television Discourse', p. 11.

⁸⁶⁶ Hall, 'Encoding and Decoding in the Television Discourse', pp. 4, 5.

⁸⁶⁷ Ellen Seiter, *Television and New Media Audiences* (Oxford: Oxford University Press, 1999), pp. 14-15. See also Morley, 'Changing paradigms in audience studies', p. 18.

Morley, 'Changing paradigms in audience studies', pp. 18, 38-39. Seiter also mentions context as important – see Seiter, *Television and New Media Audiences*, p. 15.

episodes of the series was like real life, sometimes even criticised for being too realistic. Whilst *Doomwatch* as a genre was science fiction, it mirrored real life so convincingly and closely that its stories were not a fiction, but often had an element of truth to them. It can be argued that, perhaps, the audience went further than the producers intended. *Doomwatch* was seen as science fact by the producers, and some of the audience recognised this, with the media and politicians using the word 'Doomwatch' to infer anything environmental-related. Although the series was written as a thriller, with plot devices used to establish tension, it was consistently seen as more 'science fact' than science fiction, covering stories and topics which could conceivably occur in real life. The second season story 'The Human Time Bomb,' which aired on 22 February 1971, was described in the Audience Research Reports as being believable:

As was remarked "we all know this is fiction but unfortunately yesterday's fiction is often today's fact" and, certainly, this study of the tensions that could develop in those living in towering blocks of flats seems uncomfortably near reality, in several opinions. It was a programme that highlighted one of today's social problems, and proved both entertaining and thought-provoking ... "Doomwatch always leaves me with something to think about such as 'can that really happen?' In most cases the answer is "Yes" so if there isn't a real Doomwatch, there ought to be one."

Other stories were commented on as being similarly realistic. The final episode of the first season, entitled 'Survival Code,' aired on 11 May 1970 with 22.7 per cent of the United Kingdom's population watching (higher than viewers to both BBC Two and ITV). It was again described as believable, displaying 'a strong sense of realism, not only in the way the various characters reacted to danger and the understandable antagonism between the military and Doomwatch personnel, but in its highlighting of the very real hazards to which members of the public may be

⁸⁷⁰ Doomwatch episode 'The Human Time Bomb', originally aired 22 February 1971, R9/7/109 – Audience Research Reports – Television – General Chronological January & February 1971, WAC.

subjected without their knowledge.' The episode was even criticised for being a little too believable, with one reviewer stating "we know that a very similar 'accident' has already happened," with another stating it 'was "more science fact than fiction." It was also noted that, as well as providing an entertaining and informative story, the series was worth watching for 'it's clear and realistic look at a variety of subjects in the not-too-distant future – and indeed the present, some added, the immunity of some rats to pesticides, and the experimentation with live foetuses having already been reported.'871

One strength of the series was that it brought real science into people's homes 'explaining about embryo research, subliminal messages, wonder drugs, dumping of toxic waste, noise pollution, nuclear weaponry, animal exploitation and genetic mutations creating a particularly large and vicious race of rats and a virus that consumed plastic causing aeroplanes to fall out of the sky.'872 Television was also a good medium for the producers of the series to get their message across as it offers viewers an experience not got from novels and films, which are records of the past – audiences know that the end of the narrative has been written as soon as they start to read a novel or watch a film; however, 'in television serials ... the future appears to be as unwritten as our own.'873 The factual elements of the series ensured that thought-provoking stories entered people's consciousness and the Audience Research Reports reveal this, with comments of realism and comparisons to real-life events. The series was special, a comment from a viewer of the series states, as episodes "touch on things the layman never gives a second thought to", and "make people realise how progress can get out of hand,"

Fiske, 'Moments of television', p. 67.

⁸⁷¹ Doomwatch episode 'Survival Code', originally aired 11 May 1970, R9/7/105 – Audience Research Reports - Television - General Chronological May & June 1970. WAC.

⁸⁷² Quote taken from *Doomwatch* website. See 'Doomwatch' tab and 'What is Doomwatch' column - http://www.doomwatch.org - accessed electronically 8 July 2012.

with episodes leaving 'food for thought' and viewers with a feeling that "this could come true." *874

As further evidence of the popularity of the series, three *Doomwatch* stories were even converted into children's books, as part of a literacy programme in schools. To convert three stories from an influential and successful television programme into a book aimed at school children shows not only the impact that the programme itself had but also the targeting of a new audience who may not be familiar with the television programme. In addition, the book was produced as part of Longman's non-fiction series, again reflecting the issues raised in the programme being more factual than science-fiction in nature, with co-creator Gerry Davis himself describing the series as an adventure series which was 'science fact-fiction.'

One reason why *Doomwatch* was so popular could be because it fell within the genre of science fiction. Unlike documentaries or other genres, science fiction offers viewers a view of the present through allegory. An article in the journal *Progress in Human Geography* argues that certain aspects of science fiction writing 'have received widespread academic praise for their recognition and ... [understanding] of the sociospatial processes underlying the postmodern condition now prevalent in western societies, and their future visions of the new spatialities this condition will evoke.' The appeal of science fiction, the article continues, is that it creates a sense of 'estrangement' in the participant whether reader or

⁸⁷⁴ *Doomwatch* episode 'The Logicians', originally aired 15 March 1971, R9/7/110 – Audience Research Reports – Television – General Chronological March & April 1971, WAC.

Doomwatch Manuscript, R43/999/1, WAC. See also Doomwatch – Book Publishing, R43/998/1, WAC. Davis's comment appears in Commissioning Brief from G. Davis for story 'Your Body Will Never Forgive' (Second Series episode 27), T48/333/1 – Malcolm Hulke (Drama Writer's File), WAC.

Rob Kitchin & James Kneale, 'Science fiction or future fact? Exploring imaginative

^o Rob Kitchin & James Kneale, 'Science fiction or future fact? Exploring imaginative geographies of the new millennium', *Progress in Human Geography*, 25:1 (2001), p. 20.

viewer, but with science fiction, unlike works of fantasy, the genre seeks plausibility by 'balancing the fantastical with a scientific rationale that domesticates the implausibility of the narrative.'877 Doomwatch therefore could use 'science fact' in a 'science fiction' setting, which, as the Audience Research Reports show, was effective. Some scientists even employed science fiction in their work. The classic ecological text still in use today, and one Carson herself used, was Charles Elton's The Ecology of Invasions by Animals and Plants, which first appeared in 1958 (and as of 2008 remains the most cited book in the field of biological invasions). 878 Elton considered foreign invaders such as the Japanese beetle across parts of America, discussing and theorising their need for resources against those of native species. Elton occasionally used science fiction works to enhance his points from the discovery of the 'lost world' by Professor Challenger in the synonymous book by Arthur Conon Doyle, to H.G. Wells's escaped laboratory animals and their deaths, in his work *The Food of the Gods*. Elton even had recourse to cover the history of colonial expansion in a chapter which described Captain Cook's voyages and their ecological impact.879

The creators of *Doomwatch*, Dr Kit Pedler and Gerry Davis had worked together previously on the long-running BBC science-fiction series *Doctor Who*.

They both shared an interest in the problems of science endangering and altering human life, which led them to create the Cybermen. It was during their time on

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⁸⁷⁷ *Ibid*, p. 21.

See Charles Elton, *The Ecology of Invasions by Animals and Plants* (London: Methuen, 1958). It has since been reprinted several times. See also David M. Richardson & Petr Pyšek, 'Fifty years of invasion ecology: The legacy of Charles Elton', *Diversity and Diversions: A Journal of Conservation Biogeography*, 14: 2 (2008), pp. 161, 163. Rob Latham mentions the work in his article, 'Biotic Invasions: Ecological Imperialism in New Wave Science Fiction', *The Yearbook of English Studies*, 37:2, Science Fiction (2007), p. 109. See also 'Charles Sutherland Elton (1900-1991), *animal ecologist*', by Kitty Paviour-Smith – http://www.oxforddnb.com/view/article/49632?docPos=3 – accessed electronically 17 November 2013.

⁸⁷⁹ Latham, 'Biotic Invasions', p. 109.

Doctor Who that they developed their idea for Doomwatch, exploring many unusual threats to humans, which were often based on scientific reality.⁸⁸⁰

From its first appearance in 1963, *Doctor Who* had covertly dealt with various environmental issues, such as the scarcity of natural resources and the problems of pollution, as well as the problem of chemicals on the natural world, seen in the 1964 story 'Planet of Giants' (Chapter 3). It became more overtly environmental in the 1970s. In particular, the story 'The Green Death,' broadcast in 1973 with Jon Pertwee playing the Doctor, dealt with the theme of environmental pollution. 881 The Doctor and his companion, Jo Grant, arrive in South Wales where a death had occurred at the local mine shaft; the body of the dead man glowing green. A local environmentalist and Nobel laureate, fictional scientist Professor Clifford Jones also played a large role in the story, which centred on the Global Chemicals oil plant. The head of the company, a man known only as Stevens, claimed the company had developed a new refining process where 25 per cent more petrol and diesel could be produced from any quantity of crude oil, with very little waste. Jones was sceptical and claimed that throughout the process, it would actually produce many gallons of waste. More deaths followed and the community was attacked by various large maggots which transformed into large flying insects. The story dealt with contemporary environmental issues, covering deforestation in the Amazon, as well as connecting to Silent Spring with debates over pesticides and events like the Torrey Canyon oil spill, and was heavily influenced by 'A Blueprint for Survival.'882

⁸⁸⁰ http://www.do<u>omwatch.org</u> – accessed electronically 8 July 2012.

^{&#}x27;The Green Death' –

http://www.bbc.co.uk/doctorwho/classic/episodeguide/greendeath/detail.shtml – accessed electronically 12 October 2012.

DVD Special Features 'The One with the Maggots' and 'Robert Sloman Interview' on *Doctor Who* – 'The Green Death' DVD.

The story was set on earth, which is significant because, rather than aliens on a distant planet causing environmental problems, the crisis was believable, in Britain, which added a certain degree of realism to the story. *Doomwatch* and 'Blueprint' were both influences on this story; the former through Jones and his team of scientists working as a loosely structured *Doomwatch*-style department; the latter, with the theme of the story about pollution. The story also reflects the growing interest in popular ecology by the general public. It is clear from the beginning of the first episode of the story, where the Doctor's and (by extension) the viewer's sympathies should lie. Jo Grant describes Jones as a younger version of the Doctor, and when he and Jones meet, the Doctor comments on how good it is to finally meet him and that he has followed his work closely. One of the first lines of the story is uttered by Grant who reads a newspaper article about Global Chemicals' new refining process. Grant reads the article and exclaims 'Don't they know how much pollution it will cause?' A little later she says, 'It's time the world awoke to the alarm bell of pollution.'

Two letters in the BBC Written Archives provide further evidence for the realism of the story. The first, dated 25 June 1973, comes from the Sales Manager at chemical company Gamlen, writing to the BBC claiming after 'The Green Death' had aired, there had been some comparisons between themselves and the fictional Global Chemicals organisation portrayed in the story. The response, dated 29 June from the Head of Television Administration Department at the BBC to the Sales Manager points out *Doctor Who*:

Is a science fiction series which owes its existence to the fantastic situation created involving time travel, visits to other worlds, battles with Daleks and other monsters etc. Anyone watching the programme would realise that any organisation depicted was part of this fantasy and did not relate in any way to

⁸⁸³ 'The Green Death', Episode One; 'The Green Death' DVD Special Features 'The One with the Maggots'; Jorgensen also mentions this, 'A Blueprint for destruction', p. 15.

reality. In view of this I cannot conceive that the reputation of Gamlen Chemicals has suffered in any way by association with the fictitious "Global Chemical" organisation. It is also worth noting that the loggia featured in the programme consists of a "G Chemicals" superimposed on a symbolic representation of the world, whereas your loggia appears to be a white G on a black background. It seems to me that there is quite a clear difference between the two symbols and there should be no cause for confusion.⁸⁸⁴

The fact that Gamlen Chemical Company felt the need to write to the BBC and themselves experiencing comparisons with the fictional Global Chemicals demonstrates the effect that this story in particular had: Gamlen's concern not to be associated with Global Chemicals is significant as they surely would not have bothered to object were the series not so popular. The fact any real company was compared to the fictional organisation at all, also shows that people questioned real scientific organisations as a result of the story, making comparisons to reality and fictional events, in a similar way to the response of *Doomwatch*. In addition, the BBC also wrote a fictional newspaper article which was published to coincide with the first episode of the story, describing the situation as favourable to Global Chemicals and that the government had 'rightly ignored' the 'crackpots' of Jones and his team and Wholewheel (the scientific body which Jones and his team worked for). Again, the fact they produced a fictional newspaper article which reads convincingly as if real, shows the impact of the programme and the credibility of the story (the science sections rather than the science fiction bits).

Dolly Jorgensen recently analysed four *Doctor Who* stories from the 1970s that dealt with environmental themes – 'The Green Death,' 'Invasion of the Dinosaurs' from early 1974, 'Seeds of Doom' from 1976 and 'Nightmare on Eden'

⁸⁸⁴ Letter from Sales Manager at Gamlen Chemical Company to the BBC, 25 June 1973, in T65/71/1 – The Green Death, WAC; Letter from Head of Television Administration Department to Sales Manager at Gamlen Chemical Company, 29 June 1973, in T65/71/1 – The Green Death, WAC.

Memo from Barry Letts (Producer) to Don Shaw regarding newspaper article for *Doctor Who* story 'The Green Death', 9 March in T65/71/1 – The Green Death, WAC. Also 'Government Go-Ahead for Global' (no other information but presumably typed copy of newspaper article), in T65/71/1 – The Green Death, WAC.

in 1979. Whilst the latter two do not feature within the time scale of this thesis, they do reveal something of a change in tone, regarding environmentalism and popular culture.886 With television being a 'cultural forum,' allowing issues to be raised and commentary to occur on real-life events, it provides often contradictory messages sometimes in one particular show. 887 Yet in the realm of science fiction, the 'integration of social values may be the most critical element that allows sciencefiction programming to resonate with its viewers.⁸⁸⁸ In a similar way to Doomwatch, therefore, science fiction was also used with Doctor Who as a medium with which to describe current environmental problems in a fantasy setting. In *Doctor Who Live: The Next Doctor*, broadcast in August 2013, comedian Rufus Hound commented that science fiction allows people to look at human problems with a degree of distance from them. The Doctor talks to the audience about life, death and the environment and understands these issues which seem fantastic but which are written in a way that the audience can relate to. 889 Whilst the Doctor does not have any particular political bias, he is seen by many to be a moral hero standing up for what is right. Jorgensen also describes how research has shown that audiences are not confused or lost by cultural commentaries that appear in scripts: interviews with fans who had watched the 1974 Doctor Who adventure 'Monster of Peladon' revealed they were acutely

⁸⁸⁶ Jorgensen, 'A Blueprint for destruction', pp. 11-26.

⁸⁸⁷ Horace Newcomb & Paul Hirsch describe television as a cultural forum in, 'Television as a cultural forum: implications for research', in *Television: the Critical View* (New York: Oxford University Press, 1994), edited by Horace Newcomb, taken from Jorgensen, 'A Blueprint for destruction', pp. 11-12.

⁸⁸⁸ Jorgensen, 'A Blueprint for destruction', p. 12.

Rufus Hound speaking on BBC television programme *Doctor Who Live: The Next Doctor*, broadcast on Sunday 4 August 2013. The programme announced the next actor who would play the twelfth regeneration of the Doctor.

aware of social commentary in the adventure about issues relating to class and gender.⁸⁹⁰

In dealing with ill effects of chemical pollution as a by-product from energy, 'The Green Death' takes the standard 'renewable energy good, non-renewable bad' stance. The apparent hippies who appear with Professor Jones, with long hair and living in a commune were not actually stereotypical; rather they were working for the community and for the wider world – one is a mathematician who studied probability factors of a projected future ecology (reflecting, perhaps, the computer modelling in *Limits to Growth*); another worked on windmill designs, having previously worked on supersonic aircraft design; and Jones himself was investigating protein-rich mushrooms which could feed the world (similar to foods like *Quorn* today).

In a further story which appeared in the series following 'The Green Death,' the Doctor and his companion encounter Dinosaurs on the then present-day earth. 'Invasion of the Dinosaurs' portrays environmentalists as villains. Although the environmentalists are the antagonists in this story, the Doctor does sympathise with them. He states, 'Look, I understand your ideals. In many ways I sympathise with them. But this is not the way to go about it.' He also claims that 'It's not the oil and the filth and the poisonous chemicals that are the real cause of pollution, Brigadier. It's simply greed.' Whilst 'Invasion of the Dinosaurs' revealed a darker side to environmentalism, it still highlights many issues of the time, issues that 'Blueprint' was also concerned with.

⁸⁹⁰ Jorgensen refers to research discussed in John Tulloch, "Through a little bit of poison into future generations": *Doctor Who* audiences and ideology, in *Science Fiction Audiences: Watching Doctor Who and Star Trek*, edited by John Tulloch & Henry Jenkins (London: Routledge, 1995), pp. 67-85, in Jorgensen, 'A Blueprint for destruction', p. 12.

⁸⁹¹ See section 'Dialogue Triumphs' –

http://www.bbc.co.uk/doctorwho/classic/episodeguide/invasiondinosaurs/detail.shtml – accessed electronically 19 October 2012.

892 *Ibid.*

In this *Doctor Who* story, people develop 'Operation Golden Age,' a plan to return Earth to an era before industrial development, prompted by concerns over the pollution levels of the planet, and they show indoctrinating films to colonists. The audience of *Doctor Who* are also shown these films – the first shows black sludge been dredged, with the voice-over: 'Ever since the dawn of the Industrial Revolution, man has continued to pollute the planet which until now has been his only home. Chemical and industrial wastes have caused widespread poisoning of the air and rivers' (reflecting back to the London smog disaster of 1952, and the Torrey Canyon oil spill in 1967). In the second film, dead fish are shown in water full of rubbish, with the voice-over stating: 'Dangerous concentrations of cumulative poisons such as mercury are already being found in fish and when fish start to die, when the very seas where life began are now becoming lifeless and stinking' (this echoed concerns raised in *Silent Spring* but also reflected issues discussed in Chapter 2 relating to littering and river pollution). The third film deals with the issue of population: 'Overcrowding in man, as in all other animal species, increases hostility and aggression, leading to the greatest crime of all, war. With the development of the atomic bomb, man now has the choice of destroying his planet quickly, through war, or slowly, through pollution.'893 Pollution was a particular concern at the beginning of the 1970s, and so this imitates wider concerns in society about pollution but also significantly reflects more inclusive issues which appeared at the time, with concern about pollution and the society which did the polluting.⁸⁹⁴ Through these films, therefore, viewers were shown

⁸⁹³ 'Invasion of the Dinosaurs'; Jorgensen, 'A Blueprint for destruction', pp. 15-16. See also The Conservation Society, 'OK, so you've read all about pollution. Now what are you going to do about it?' advertisement, *The Ecologist*, 1:5, p. 40.

There is mention of an increasing public concern for pollution in the 1970 annual report of the Natural Environment Research Council. The report also notes that the 'growing public apprehension of the impact that modern society is having on the natural environment has been sharply underlined ... by the problem of pollution'. See The Natural Environment Research Council Annual Report, 1970, p. 2, FT6/15, TNA. As a result the government even established a special commission to look into this problem – the Royal Commission on

contemporary environmental problems. These also happen to be issues which appear in the previous chapters of this work. This is an indication of how the environmentalism of the 1970s had some of its influences in post-war environmental problems. It also signifies the importance of the particular case studies discussed in the previous chapters.

'Operation Golden Age' was not dissimilar to what influenced 'Blueprint'. The book was inspired by, and called for a return to hunter-gather societies and advocated a radical restructure of society into smaller communities, also dealing with pollution, population growth, agriculture and food supplies. In 1970, the Conservation Society advertised in *The Ecologist* and stressed the link between pollution and population: 'Pollution is only one head of the hydra. Others are disappearance of raw materials, extinction of wildlife, ruin of our heritage and countryside, urban sprawl, overcrowding, lack of essential services, pressure on individual freedom – the list is endless. The quality of life – indeed its very existence – is threatened.'⁸⁹⁵ These are issues which all three films covered, which were analysed in Chapters 2-4 of this thesis, and as noted in Chapter 1, in these years, 'quality of life' issues became prevalent.

In comparison to these films, about the inference of chemicals in the environment, 'Blueprint' said: 'The spread of DDT and other organochlorines in the environment has resulted in alarming population declines among woodcock,

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Environmental Pollution. See 'Information and Advice' Policy Compendium, The Nature Conservancy Council, FT8/9, TNA. The Nature Conservancy became separate to the Natural Environmental Research Council in 1973 with the formation of the Nature Conservancy Council.

See website http://www.chakoteya.net/doctorwho/11-2.htm for transcripts of all Doctor Who episodes – accessed electronically 1 November 2012. These quotes are also taken from Jorgensen, 'A Blueprint for destruction', pp. 15-16. See also The Conservation Society, 'OK, so you've read all about pollution. Now what are you going to do about it?' advertisement, *The Ecologist*, 1:5, p. 40.

grebes, various birds of prey and seabirds, and in a number of fish species. 1896
About pollution and population it claimed: 'The combination of human numbers and *per capita* consumption has a considerable impact on the environment, in terms of both the resources we take from it and the pollutants we impose on it. 1897
About hunter-gather societies it also stated: 'For more than one million four hundred and ninety thousand years ... [man] earned his living as a hunter-gatherer. During all this time, there is no reason to suppose that the societies he developed were in any way less adapted to their respective environments than are those of non-human animals. 1898 From current knowledge of 'surviving hunter-gatherer societies, such as the Bushmen of the Kalahari,' they consumed less than a third of the resources available to them. 1899 They avoided increases in population over the point which might lead to societal destruction, they did not cause deforestation to make room for agricultural land and did not cut down trees for housing or hunt wild animals to extinction. 1900

Like 'The Green Death,' in 'Invasion of the Dinosaurs,' the writers were inspired by 'Blueprint.' And whilst, in the latter story, the environmentalists are antagonists, rather than the heroes, they are also portrayed in a positive light. Or rather, their beliefs are. As the Doctor claimed, he supported their ideology, just not their actions. Using Hall's analysis of encoding/decoding, it is clear that the producers wanted a clear message to come across from both stories – about the destruction of the planet and the alternatives to it – and in the character of the Doctor in particular, his beliefs are clear, supporting the environmentalists. As

⁸⁹⁶ Goldsmith et al, 'Blueprint', p. 3.

⁸⁹⁷ *Ibid*, p. 2.

⁸⁹⁸ *Ibid*. p. 32.

⁸⁹⁹ Ibid.

⁹⁰⁰ *Ibid*.

such, the viewer is expected to also follow the Doctor's beliefs and support the environmentalists.

Jorgensen argues that the 'Doctor's environmental message is that we cannot adopt quick fixes to reach our long-term environmental goals. The Doctor consistently approves of the environmentalist ends put forward in these series ... but disapproves of his antagonists' means.'901 The Doctor, seen as an 'ecoactivist,' connects together ecological and anthropological issues and argues for change in society. He encourages humans to change their behaviour rather than looking to an idealised past when things were supposedly better. Doctor Who does not try to persuade viewers to take a certain point of view, rather gives them the means and opportunities to form their own conclusions. 902 The term 'eco-activist' is also one which Veldman uses to describe the new more direct action groups which appeared at the beginning of the 1970s. It is also indicative of Maurice Strong being referred to as an 'activist' by The Times in relation to the planning of the UN Conference in 1972.

Whilst these are just a few examples of environmental-related television programmes that appeared in the early 1970s, they do reflect changing attitudes to the environment and an increasing concern about how humans use resources, the use of science and technology as panaceas for all of society's problems, and as more people purchased televisions in the 1970s than previously, becoming a staple of most homes, that message entered more households. Moreover they are some indication of the importance of studying post-war environmental issues in relation to 1970s environmentalism. The issues covered in the three films in 'Invasion of the Dinosaurs,' can be placed in the context of the post-war period,

 $^{^{901}}$ Jorgensen, 'A Blueprint for destruction', pp. 21-23. 902 Ibid, pp. 23-24.

where concern for the environmental effects of pollution and damage to the nature world was very real. Furthermore, by being an eco-activist, the Doctor represents the new environmental groups of the 1970s, ecological and inclusive (about environmental issues), recognising that whilst environmental problems should be dealt with, society which causes them should also be fixed. One such group, which appeared in Newcastle at the beginning of the 1970s, reflects the new concerns of the environment through activist groups.

TEC, SOC'EM, Commitment – Activist groups pushing a new agenda

It 'was no accident,' Max Nicholson wrote, 'that the 1970s opened with a wave of dismay and horror over the situation of our small planet earth, and with a responsive wave of administrative and legislative action by governments. One pressure group, which emerged because of this 'wave of dismay,' was also inspired by *Doomwatch*, with the group wanting to be a '*Doomwatch* organisation.' The group was TEC, founded and based in Newcastle. Established after the Newcastle festival at the beginning of the 1970s, when Kit Pedler gave a talk, TEC came into being on the suggestion of one member of the audience who urged that the Tyneside area should have a *Doomwatch* organisation itself. This organisation is included here because it provides further testimony to the impact of *Doomwatch*. As a direct result of listening to one of the programme's creators, the pressure group was founded. TEC had three aims — to discover the facts, to inform the public and to pressure the authorities into action. In these objectives the group paralleled the fictional *Doomwatch* department on the television.

⁹⁰³ Nicholson, *The New Environmental Age*, p. 110.

⁹⁰⁴ Ken Pollock, 'Doomwatch', *Muther Grumble*, Issue 2 February 1972 – http://www.muthergrumble.co.uk/issue02/mg0208.htm – accessed electronically 7 January 2013.

objective analysis of all environmental problems, testing all theories and hypotheses openly.'905

Beginning by targeting local issues whilst lending support, when appropriate, to national organisations, the first meeting of TEC attracted 70 attendees. Although *Doomwatch* was a major influence, a growing concern about pollution also featured highly as a major issue for TEC, as did waste disposal, with the group undertaking a number of campaigns in these areas. In support of SOC'EM, TEC challenged motorway expansion in Newcastle, assisting in the filibusting of the public enquiry held by the council. TEC also concerned itself with waste paper and started a waste paper collection in the Jesmond and Heaton areas of Newcastle which 'made a steady income.' In addition, excessive packaging was a target and a low-packaging food store in Walker which the group set up was packaging free, with customers bringing their own reusable jars and boxes with which they could use to take goods from larger, bulk containers.

TEC had an impact which was reflected across the region. The local council began a waste paper collection, the motorway was cancelled, and TEC's planners 're-thought urban transport and a lot of buildings were preserved that might have been demolished. It was a time for "comprehensive re-development" of some areas, although this soon fell out of favour in the face of protests; a conference "Planning for People" was organised by TEC at which David Bellamy presided as chair, and drew attention to the problems of the movement of people to suburban developments with a subsequent loss of community; Bellamy also spoke on the issue of pollution; and TEC actively engaged the media and assisted in the

⁹⁰⁵ The quote comes from questions sent to Ken Pollock, a TEC founder, received December 2012.

⁹⁰⁶ Ken Pollock, 'Doomwatch', *Muther Grumble*, Issue 2 February 1972 – http://www.muthergrumble.co.uk/issue02/mg0208.htm – accessed electronically 7 January 2013.

⁹⁰⁷ Questions sent to Ken Pollock concerning TEC, received December 2012.

production of a couple of BBC documentaries made by BBC Newcastle about the plight of locals under redevelopment. However, TEC were less active than other groups as they did not believe direct action achieved anything meaningful. 908

By the early 1970s, urban areas had developed in two ways – in their 'physical form' where architecture was reduced to its bones and also through a drive to rebuild or redesign cities. This latter development in British cities 'caused widespread public protest.'909 These protests were 'directed at the major schemes for new urban motorways to accommodate the rising tide of motor traffic.'910 These schemes saw motorways planned to be constructed through residential areas, with many communities upset or destroyed by living next to these new roads – the schemes further enhanced the 'concrete jungle.' 'In this urban nightmare, people's protests sometimes took the form of a desperate cry for help.⁹¹¹ One such cry for help came from the city of Newcastle upon Tyne, in the form of SOC'EM. SOC'EM appeared 'against a national background of the growth' of similar NIMBY groups, but differed from these in a number of ways, notably because it achieved international recognition whilst it protested against an immediate, local concern. 912

Christopher Rootes notes that 'Local environmental conflicts are ubiquitous, but few produce sustained mobilisations, fewer succeed in mobilising at a level beyond the local, and fewer still are effectively translated into national issues.⁹¹³ Local campaigns can be 'vigorous, inventive and sometimes protracted, but they are usually unable to realise their goals because those who have the power to

⁹⁰⁹ Nigel Taylor, *Urban Planning Theory Since 1945* (London: SAGE Publications, 1999), p.

^{75.} ⁹¹⁰ *Ibid*, p. 76.

⁹¹² R.J. Buswell, 'Reconciling the past with the present: Conservation policy in Newcastle upon Tyne', CITIES: The International Journal of Urban Policy and Planning (August 1984), p. 502. ⁹¹³ Rootes, 'From local conflict to national issue', p. 96.

make decisions that affect the environment are not themselves local. GOC'EM was predominantly a NIMBY group, concerned with an immediate problem, the construction of a motorway through Newcastle. Yet this group was not only able to realise its goals, in preventing the motorway being constructed in Newcastle, but was known across Britain and as far away as Toronto, Canada and Johannesburg, South Africa. It therefore bucked the trend in NIMBY groups and is worth considering because of this here. It dealt with an issue in ascendency at the time, and was successful in this, but also worked with other groups (forming broad networks, indicative of the environmental movement) and whilst had an individualistic base, common to all NIMBYs, it sought wider environmental protection for the North East region (and for the nation as well as on the international stage).

The proposed motorways required large scale construction projects, rerouting existing roads and demolishing buildings. One section of one of the planned motorways was to pass through Jesmond, a middle-class area of the city, and specifically pass the end of Rosebury Crescent. One resident of that street, Alan Brown, was aghast at this plan and so formed SOC'EM. *The Times* described SOC'EM as a 'vociferous' group, and it was active in Newcastle upon Tyne, c.1972-1982. SOC'EM is under-explored and rarely discussed by scholars, yet it was successful in its campaign and gained international attention. It is also evidence of a pressure group, dealing with some of the issues which other new protest groups of the 1970s were dealing with, whilst drawing on much of what has been covered in the previous chapters. It differed from the more moderate

⁹¹⁴ Ibid.

⁹¹⁵ John Young, 'City worried by scale of "Dan Smith's changes"', *The Times*, Monday 29 April 1974, p. 5.

pressure groups of the 1950s and 1960s by writing an inclusive, ecological mission statement.

This mission statement described SOC'EM as 'an action group devoted to the betterment of Newcastle upon Tyne as an historic, living city,' which also opposed motorways, and pollution and waste, empty buildings lying dormant for months and years. It encouraged building conservation, wanted more trees to be planted, more open spaces in the city, and wanted a more ecologically sustainable society and social justice in the field of resource management. Whilst this is a rather broad statement, it brought together many dispersive ideas into one organisation, reflecting the development of the environmental movement in the 1970s, from groups focused on singular issues to groups which had more inclusive concerns. SOC'EM achieved success almost immediately which also differed from other pressure groups of the period (notably FoE in Britain, founded in 1971, were unsuccessful in their first campaign which was against the Schweppes drinks company).

SOC'EM's membership was diverse, attracting people from across the city, and it varied from people who today might be a member of the Northumberland and Newcastle Society, a civic-building conservation trust, to those who might be members of the radical environmental pressure group Earth First. At its core, however, were experts in law, town planning, transport and so on, who knew exactly what they were talking about and could argue convincingly against the plans.⁹¹⁷

SOC'EM survived for a decade, eventually folding due to diminishing interest. The height of SOC'EM's success, however, occurred early in its life in

917 Interview with Don Kent, 10 April 2012.

^{916 &#}x27;SOC'EM! Mission Statement', TWA.

1972 when the city council held consultations regarding the motorways and SOC'EM launched an aggressive campaign before and during these consultations, eventually leading to the plans being thrown out and the city council scrapping the scheme. Whilst the city council had planned the redevelopment of the centre of Newcastle with a series of urban motorways from the mid-1960s, they had forgotten to apply for side-road orders, which were needed to close roads which would otherwise exit onto the motorways. Applying to themselves retrospectively for these orders forced them to hold consultations on the plans. At the main consultative session, SOC'EM, assisted by other local groups including TEC, filibustered the meeting, bringing in experts in pulmonary medicine from local hospitals to describe the effects of air pollution on human lungs (similarly to the clean air campaigns in the 1950s and Commitment, below). They also had planners and transport experts testify, who described alternatives to the motorways and opposition to it. Despite this, the council approved these orders subject to final approval by Environment Secretary Peter Walker. When he received these orders he questioned the wisdom behind the scheme and responded by stating that he would only approve the plans if there was a radical rethink in the plans. The city council, at this point, abandoned the plans and cancelled the project. 918

As part of their opposition to the motorway schemes in the city, the group produced an influential report, *Motorways and Transport Planning in Newcastle upon Tyne*. This report argued against urban motorways convincingly and succinctly. This report was an early anti-motorway publication, which asked the question 'is this a good idea for the city?' and which explained the direct correlation between building motorways and the number of cars that use them –

⁹¹⁸ *Ibid*.

the greater the number of motorways, the more cars use them, forcing councils to expand their motorways systems which would then cause an even greater number of cars using them, and so on.⁹¹⁹

SOC'EM received requests for copies of the report from universities across the United Kingdom, including the universities of Keele, Hull, Liverpool, Coventry and Northumbria. However the report also gained international attention, highlighting the importance of this group within a study of post-war environmentalism in Britain as well as Britain's place within the international environmental movement. Pall The University of Witwatersrand in Johannesburg, South Africa and Toronto Public Library, Toronto, Canada, also requested copies of the report. In Toronto, at about the same time that SOC'EM was fighting the motorway plans in Newcastle, the Stop Spadina, Save Our City Co-ordinating Committee (SSSOCCC) were battling similar plans to build an urban motorway through Toronto. SSSOCCC's campaign was similar to SOC'EM, conducting public lectures, petitions and debates. Eventually that section of the motorway was also prevented from being built. This shows how important SOC'EM was, dealing with issues which were international in nature (urban planning and the construction of roadways through cities) yet before cities en-masse began construction of these

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one-for-torontos-neighbourhoods – accessed electronically 17 January 2013.

⁹¹⁹ *Ibid*.

⁹²⁰ As noted above, both the European Conservation Year of 1970, and the United Nations Conference on the Human Environment in 1972, were influenced by activities in Britain. Furthermore, several Green Parties around the world were inspired by a British publication/book, *The Ecologist*'s 'A Blueprint for Survival'. As such, Britain had a role in the emergence of the international environmental movement.
⁹²¹ See 'Minutes' from January and November 1975 for mention of South African and

Canadian requests respectfully, in SOC'EM Papers, Accession no. 2659, TWA.

922 The Toronto campaign, Stop Spadina Campaign, was an early 1970s campaign to prevent the construction of a motorway through Toronto's neighbourhoods. Urban activist Jane Jacobs was involved with this campaign, after cutting her teeth fighting urban development in New York in the 1960s. The campaign is mentioned here — http://www.pps.org/reference/jjacobs-2/ — accessed electronically 17 January 2013. Jacobs saw cities as ecosystems which was an approach SOC'EM's motorway report used, insofar as it questioned were the plans a good idea for the city. For the Stop Spadina Campaign, see also — http://ebw.evergreen.ca/move/feat/stopping-the-spadina-expressway-winning-

systems in Britain and is an example of a successful scheme in a geographically isolated region, far from the centre of power in London. ⁹²³ Therefore SOC'EM not only dealt with issues which were locally and nationally important with relevance to towns and cities across Britain; they also had an impact across the globe.

The MP for Gateshead West, who at the time was John Horam, admits that there was an obvious problem with the roads in Newcastle and that a solution was needed, but a more suitable one had to be found. It was necessary that the whole scheme of urban motorways was revised rather than completely abandoned and today there are still motorways through the centre of Newcastle. 924 Whilst SOC'EM did employ some forms of non-violent direct action, these were small scale, with the group's strength lying more in debate and expertise. One example of their direct action was their uprooting of a 30-foot tree from Exhibition Park in the city centre. Council employees had identified trees which were to be removed and painted a red cross on them. SOC'EM then painted red crosses on all the trees, to confuse the council employees. It was then that the tree 'Arthur' was uprooted and taken to the Civic Centre. This protest, in early 1972, was reminiscent of FoE's campaign against Schweppes which involved the latter group collecting the company's non-returnable bottles and placing them around the company's bottling plant. Whilst Friends of the Earth's protest was unsuccessful, the action by the group did create media headlines, which SOC'EM noted and adapted for their own ends. SOC'EM described the felling of the trees as 'just a small part of the

⁹²³ See 'Stopping the Spadina Expressway: A Triumph that shaped Toronto' – http://ebw.evergreen.ca/move/feat/stopping-the-spadina-expressway-winning-one-for-torontos-neighbourhoods – accessed electronically 17 January 2013. In the SOC'EM archives, Toronto's Public Library's request can be found in 'Minutes', November 1975, SOC'EM Papers, Accession no. 2659, TWA. Whilst it would have been useful to include any information supplied from the University of Witwatersrand, requests for information were not responded to.

⁹²⁴ Interview with John Horam, ex-MP for Gateshead West, 17 January 2013.

destruction of Newcastle as a city of character, as a place to really live in with pride.'925

SOC'EM often used their resources to argue against the motorways, and their greatest assets were the members, many of whom were experts in law and planning. As a result, they not only produced their motorway report but also sent out questionnaires to councillors standing in local elections in Newcastle in 1972 to find out their opinions on environmental issues. Of 83 that were sent, only thirteen were returned – one from an Independent and twelve from Labour. 926 This lack of interest from elected officials of the city council is indicative of the necessity for the formation of the grassroots groups which emerged in the years following. SOC'EM, therefore, and many of the groups which emerged since, was a grassroots-based organisation, which had not been seen to the same extent previously (the National Smoke Abatement Society, for instance, and the clean air campaigns were often generated through or with other organisations or campaigners who did not necessarily represent the 'grassroots' of British society). It offered a departure from previous environmental policies in Britain, which had seen the creation of the Nature Conservancy and even government responses to Silent Spring.

SOC'EM and TEC are important in a study of the development of an environmental consciousness and environmental activism in post-war Britain for a number of reasons. First, when compared with the more direct-action orientated groups such as Commitment (see below), it is clear there is room for both action-

⁹²⁵ Alan Brown, 'It's More Than Just Trees...', *Muther Grumble*, Issue 5, May 1972 – http://www.muthergrumble.co.uk/issue05/mg0502.htm – accessed electronically 25 November 2012; Interview with Don Kent, 10 April 2012.

⁹²⁶ Maurice, 'Do They Care?', *Muther Grumble*, Issue 5, May 1972 – http://www.muthergrumble.co.uk/issue05/mg0503.htm – accessed electronically 25 November 2012; Anon, 'SOC'EM', *Muther Grumble*, Issue 6, June 1972 – http://www.muthergrumble.co.uk/issue06/mg0604.htm – accessed electronically 25 November 2012.

based and policy-based organisations and one complements the other. Second. both SOC'EM and TEC were involved in the anti-motorway campaigns that took place in Newcastle at the beginning of the 1970s, campaigns which were influential and were copied later, achieving international coverage. They therefore set the tone for later anti-road protests. In addition TEC in particular reflects the impact that the BBC drama series *Doomwatch* had on society – it was a direct influence in the establishment of the group. Finally, along with other local groups such as Friends of the Earth Tyneside, both TEC and SOC'EM joined a local environmental consortium which was designed to co-ordinate common environmental issues locally. This is an example of the complex 'broad networks' that Christopher Rootes uses to define the environmental movement. With Don Kent being involved in SOC'EM, Commitment, and Friends of the Earth Tyneside, in addition to other pressure groups, and with these groups working together on several projects, Rootes' broad networks were created; these represent the branches of the tree in the analogy used in Chapter 1, and is evidence that the environmental movement existed at the time. These networks can also be seen with SOC'EM's communication with people and organisations across Britain, in Canada and in South Africa.

Whilst SOC'EM rallied against motorway construction in Newcastle, at about the same time in London, the Young Liberal pressure group Commitment was also engaging in non-violent direct action against motor vehicles.

Commitment was a 'political ecology action group opposed to the subordination of man to machines, nature to man, and people to other people.'927 As Derek Wall has noted, the tactics Commitments used were copied twenty years later by the

⁹²⁷ Tristan, 'Come Together', *Muther Grumble*, Issue 17, December 1973 – http://www.muthergrumble.co.uk/issue17/mg1708.htm – accessed electronically 25 November 2012.

group Reclaim the Streets. ⁹²⁸ Commitment claimed that ecology mattered because not only was it of intrinsic importance but it was difficult for conventional parties, geared to growth and profit, to ease off when the situation gets critical. 'Both big business and the unions would resist policies which cut down their power-base, so that there could be room for a third force, based on community organisation, to make an impact, so that libertarians can move away from the side lines of history, which is where we seem to be now.' ⁹²⁹ This also highlights some of the reasons PEOPLE was in 1973 as a new political party – it offered something new and different to the conventional parties which were geared solely to growth and profit.

Commitment formed in 1971 in support of a radical candidate for the chairmanship of the Young Liberals, the youth wing of the Liberal Party. At the time the Young Liberals were considered by some to be left-wing and on the left of the Labour Party. 930 They quickly developed an interest in environmental issues and were inspired by the Committee for 100 in Britain. The group disbanded in the mid-1970s as the Young Liberals became less radical and other environmental pressure groups, such as Greenpeace UK, began to appear. In addition the disparate and unconventional style of the group – it did not have the rigidity of membership which groups like SOC'EM had – also led to its decline. 931 It was estimated in October 1971 that Commitment had about 200 members, half of whom were neither members of the Young Liberals nor the national Liberal Party. 932

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⁹²⁸ Wall, 'Snowballs, elves and skimmingtons?', pp. 82, 91.

⁹²⁹ Anon, '...in a green peace.', *Black and Red Outlook*, no. 7, n.d. likely to be 1972/73, p. 6, 758/1/3/14. MRC.

⁹³⁰ Interview with Victor Anderson, 3 May 2012.

⁹³¹ *Ibid.* Greenpeace UK did not establish itself in Britain until 1977.

⁹³² John Windsor, 'Young Liberals plan to force party's hand', *The Guardian*, 4 October 1971, p. 12.

Commitment held two demonstrations in London concerning air pollution. The first and larger of the two was held in December 1971 in the run-up to Christmas, targeting Christmas shoppers; the second and smaller one in March 1973. The main protest in December 1971 took place on 18 December, the last shopping Saturday before Christmas. Oxford Street was blocked to traffic and the group attempted to put chains across the road and hold up cars at traffic lights, to protest against the priority given to cars over pedestrians in central London. The action, which resulted in 44 arrests, also involved a march to Oxford Street from Hyde Park carrying balloons filled with 'fresh country air,' indicative of Edith Summerskill and the clean air exhibitions of the 1950s when she attended one and brought with her a jar of country air (Chapter 2). 933 It is partly for this reason that Commitment is included here; it connects to issues of the 1950s and the campaign then for clean air. In this way, it shows how ideas in the 1970s were linked to earlier environmental issues.

Some demonstrators sat in front of cars at traffic lights and some leaflets were given out by activists wearing gas masks. Ultimately the protest was unsuccessful, the group was dispersed after about an hour, and there was very little traffic chaos, with only about five minutes of disruption. The police popped most of the balloons. In a scene reminiscent of children in Cornwall crying at the sight of oil-covered birds (Chapter 4), when the balloons were popped, the children at the protest burst into tears. 934 The Guardian, however, described the protest as being reasonably successful and a spokesman for Commitment was reported as

⁹³³ Interview with Victor Anderson, 3 May 2012; Anon, 'Police soon deflate protest', The Guardian, 20 December 1971, p. 7.

934 Email correspondence with Brian Milton, a founder of Commitment, March-May 2012.

claiming most of the public already knew about the protest and no one complained, some even getting involved in debates with protesters. 935

Commitment's demonstration in March 1973 was a smaller affair. The group's target then was the closure of Piccadilly, which they saw as the ecological equivalent of the Committee for 100's action against the atomic bomb, only 'this time on an issue which more easily lends itself to direct and community action, and which most "ordinary" people see as more directly affecting them, every day of their lives, which has greater potential for involving them. '936 Commitment claimed everyone knew all the issues, 'accidents, noise, nuisance, lead pollution, homes destroyed, cost of road-building, loss of planet's petroleum reserves,' yet they ignored them, which was why direct action was needed. 937

Commitment should feature in a study of British environmentalism because of their status as an early direct action environmental group. They appealed to a sense of community and attracted local people to join them, in their action. In the weeks preceding the protest in December, a number of tactics were discussed, including cough-ins during rush hour; giving out leaflets whilst wearing gas masks; blocking (safely) the exhausts of cars with potatoes and rags; buying shares in polluting companies and attending their AGMs (annual general meetings, usually held with shareholders) to protest; and filling balloons filled with fresh country air. 938 Some of these were employed in the December protest and some form the basis of tactics used by environmental activist groups today – for instance, a number of groups have purchased shares of polluting companies, attending these companies AGMs in order to protest against their activities. In addition to non-

⁹³⁵ Anon, 'Police soon deflate protest', *The Guardian*, 20 December 1971, p. 7.

⁹³⁶ 'Close Piccadilly – Saturday 31 March at 3pm, and "All Britain Street Closing", *Proo73*, no. 9, 26 March 1973, p. 49, 758/1/2/26, MRC.

⁹³⁸ Anon, 'Anti-pollution demonstration', *The Guardian*, 26 October, 1971, p. 7; Anon, 'Young Liberal plan to fight pollution', *The Guardian*, 1 September 1971, p. 5.

violent direct action, Commitment followed the example of SOC'EM in also undertaking surveys on environmental issues. They used "posters, stickers, leaflets, petitions, public meetings, exhibitions, demonstrations [and] phone-ins" to inform the public of the issues they were protesting about. Gamman Commitment had connections with the earlier clean air campaign of the 1950s, showing a correlation between air pollution campaigners in the post-war period and those in the 1970s. Commitment also worked with other pressure groups at the time such as Friends of the Earth and it inspired later protests, highlighting its longer term significance. It can be contrasted with SOC'EM and TEC in its style of protest, with SOC'EM and TEC adopting more moderate approaches to their campaign, whilst Commitment was an example of the more prevalent direct action groups which emerged in the early 1970s.

Both SOC'EM and Commitment appealed to a local, grassroots base for their support and opposed local or national government policies, which adversely affected the environment. Both groups campaigned on the issue of air pollution, although they did this in different ways and developed different approaches to their arguments. Some members of SOC'EM were also involved with Commitment and their protests in central London, which again reflects some crossover between the two. Finally, both organisations are important for discussion in a study of modern British environmentalism as they both are the first – or early – groups employing a range of tactics which were developed and used by later groups and are still in use today. SOC'EM's motorway report gained international coverage and its opposition to motorways provided a trend for later campaigns; Commitment were pioneers of

⁹³⁹ As quoted in Tristan, 'Come Together', *Muther Grumble*, Issue 17, December 1973 – http://www.muthergrumble.co.uk/issue17/mg1708.htm – accessed electronically 25 November 2012.

non-violent direct action with regards to the environment, using more radical tactics. 940

Friends of the Earth (FoE)

Of the pressure groups discussed in this thesis, most were successful in achieving their aims. Some – like Commitment or the Teesdale Defence Committee – were not. Kimber, Richardson and O'Riordan describe some of the ways which groups can achieve success (Chapter 1). Perhaps the biggest of the new eco-activist, direct action groups which emerged in the early 1970s and certainly the group with the longest life, was Friends of the Earth, which actually failed in its first major campaign. This group 'had a reputation as a leading environmental campaigning organisation.'941 Its first three major campaigns were against Schweppes, Rio Tinto Zinc mining company and their involvement with the UN Stockholm Conference.

In 1969, the Schweppes beverage company joined with Cadbury chocolatiers to become Cadbury Schweppes. 942 Shortly after, Schweppes altered their policy regarding the return of disposable bottles. Whereas previously, consumers could return empty bottles to Schweppes for them to use them again, now Schweppes started to use non-returnable bottles. FoE activists decided to protest at this, and began a campaign which culminated in surrounding the Schweppes bottling factory with plastic bottles. Explaining the protest, Graham Searle, the new head of FoE attacked supermarkets for creating the conditions which required food to be produced with more packaging. It just happened that

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⁹⁴⁰ See PEOPLE Newsletter, January 1975, pp. 8-9, from Professor Michael Benfield, a founding member of PEOPLE.

⁹⁴¹ Susi Newborn, *Bonfire in my Mouth: Life, Passion and the Rainbow Warrior* (Auckland: Harper Collins, 2001), p. 83.

⁹⁴² See Geraldine Fabrikant, 'General Cinema Buys 8.3% of Cadbury Schweppes', *The New York Times*, 27 January 1987 – http://www.nytimes.com/1987/01/27/business/general-cinema-buys-8.3-of-cadbury-schweppes.html – accessed electronically 18 October 2013.

Schweppes had recently changed their policy and were a high profile organisation with which Friends of the Earth could target. To gain publicity, some of the FoE staff dressed as giant bottles and giant jars. 943

Initially Schweppes claimed that manufacturers did not create litter, consumers did. This had already been implied during the anti-litter campaign of the 1950s, placing the problem of litter at the door of consumers. But Schweppes did not appreciate how environmental ideas had evolved and whilst Friends of the Earth was still concerned about consumers' role in littering, it was also concerned with the manufacturers' role. This rather Carsonesque concern with inorganic waste (plastic does not biodegrade) mounting up in the environmental builds on arguments made at the time about the scarcity of resources, through publications like 'Blueprint' and *Limits* as well as building on arguments in the 1950s about litter being 'pollution of the ground.'944

Ultimately this campaign was unsuccessful and Schweppes did not change their policy. But in some ways, FoE succeeded far beyond what they had originally hoped. The result of this demonstration 'was extensive media publicity and with it, growing membership and influence that was to make it the leading environmental group in Britain by the mid-1970s.'945 As Robert Lamb has noted, an 'oddity that attended the birth of all the more proactive large environmental groups of the 1960s and 1970s was the defining actions, the campaigns that gave them proof of identity were in many cases wasted efforts.' Yet out of these campaigns however,

⁹⁴³ Peter Wilkinson & Julia Schofield, *WARRIOR: One Man's Environmental Crusade* (Cambridge: the Lutterworth Press, 1994), p. 14.

⁹⁴⁴ *Ibid*, pp. 60-61.

Lamb, *Promising the Earth*, p. 39; See also Cooper, 'War on Waste?', p. 60

FoE 'somehow emerged the moral victor, with a public profile raised beyond normal expectations.'946

Friends of the Earth has a place within this thesis because it was the first of the new radical environmental groups. Whilst the Conservation Society had begun to critique society and shift the focus from pollution to the polluter, this was still a largely conservative organisation, in a transition phrase. It never engaged in direct action like Friends of the Earth did, instead preferring to be moderate experts like the National Smoke Abatement Society (NSAS). The Conservation Society straddled the more traditional groups like the NSAS and more radical ones like FoE. The FoE bottle campaign occurred throughout 1971, with intermittent press releases, advertising and demonstrations. As Timothy Cooper has described, this bottle campaign established waste 'as one of the main concerns of British environmentalism.'947 Activists accentuated the relationships and links between waste and pollution, and the idea of waste as an exploitation of resources. This became a familiar theme of *Limits*, 'Blueprint' and PEOPLE, which all concerned themselves with resource exploitation, amongst other things. As noted above, it was also copied by SOC'EM with Arthur, the tree. Don Kent even explained how he was involved with the bottle protest itself. 948

Friends of the Earth's direct action style of protest attracted young people to it at the expense of the Conservation Society. Inside their tiny offices, the small number of staff and volunteers were inundated with a huge amount of mail and phone calls from interested parties. For them, it did not really matter whether they were successful or not. Actions like the bottle dump gave them more mediafriendly images than they could ever have hoped for. These images also reflected

⁹⁴⁶ Lamb, *Promising the Earth*, p. 39.947 Cooper, 'War on Waste?', p. 60.

⁹⁴⁸ Interview with Don Kent, 10 April 2012.

the new inclusive environmentalism of the 1970s. These included concerns about industrial growth running rampant throughout the world, destroying the environment; pollution in all its forms; chemical and wastes from farms and industries entering waterways, land, and the air. ⁹⁴⁹ The bottle demonstration showed people the link between plastics and waste and how simple products like the plastic bottle could actually be a major environmental issue (this also is indicative of what was discussed in Chapter 2). It also confirms why *Doomwatch* was so popular, dealing with real-life issues (such as with 'The Plastic Eaters,' discussed above).

FoE existed to encourage the 'intelligent, economic use of the earth's ever-diminishing natural resources.'950 One of their newsletters from 1972 called for people to join or establish local Friends of the Earth groups; contact MPs and write to the DoE 'asking them to take immediate steps to curb those who are destroying our environment and to initiate rational environmental education policies.'951 The newsletter continued that people should promote local events 'and engineer gatherings to discuss the possibilities of recycling centres and transport pools. *Get out and get involved!*'952

Friends of the Earth was, and is, made up of local branches which dealt with local as well as national and international issues. This allowed different FoE groups across the country to campaign on local issues which affected their own area, in addition to campaigns which affected the country as a whole, or the international community. It also epitomised the environmental movement of the early 1970s, forming broad networks with other groups, and engaging with local,

949 Lamb, Promising the Earth, pp. 40, 42.

⁹⁵⁰ Friends of the Earth Newsletter, 'A Blueprint for Survival', p. 44.

⁹⁵¹ Ibid.

⁹⁵² *Ibid*.

region, national and international environmental issues.⁹⁵³ By 1973 there were more than 70 groups across the country in Britain.⁹⁵⁴ In Newcastle, the local FoE group assisted SOC'EM in its anti-motorway battle. In London they supported Commitment's demonstration, recognising a place for direct action groups, although Friends of the Earth was not one, as it sought to remain respectable (they wanted to be school-friendly). Over time the many large local offices and small central office reversed in importance, and today there are relatively few smaller offices and guite a large main one.⁹⁵⁵

The group's first effective campaign in Britain was to prevent the multinational mining company, Rio Tinto Zinc (RTZ) from mining copper in Snowdonia National Park in 1972. FoE was particularly concerned about mining in Snowdonia because mining of the nature proposed would directly affect many 'organisms through both physical and chemical modification of their environment, and indirectly in a variety of ways.'956 Outcry from the Conservation Society, Friends of the Earth and other groups led the BBC to run a *Horizon* documentary called *Do You Dig National Parks?*957 The Audience Research Report for that programme notes that 70 per cent of viewers who watched the programme, which aired on the BBC on Monday 22 May 1972 between 21:20-22:45, found it 'Highly informative' with an average of 94:6 viewers finding it thought-provoking: not memorable. This is noteworthy in considering the fact RTZ were not successful in their aim, and the mine was not built. The Research Report stated that 'many

⁹⁵³ Nehring, 'The Growth of Social Movements', pp. 395-396.

⁹⁵⁴ Lamb, *Promising the Earth*, p. 51.

⁹⁵⁵ Interview with Don Kent, 10 April 2012; Wilkinson & Schofield, *WARRIOR: One Man's Environmental Crusade*, p. 15; Jordan & Maloney, *The Protest Business?*, p. 18.

⁹⁵⁶ D.A. Ratcliffe, 'Ecological effects of mineral exploitation in the United Kingdom and their significance to nature conservation', p. 355, The Nature Conservancy, FT8/9, TNA. ⁹⁵⁷ Lamb, *Promising the Earth*, p. 52.

⁹⁵⁸ Audience Research Report for *Horizon* programme *Do You Dig the National Parks?*, originally aired Monday 22 May 1972, in Science and Features – Horizon 'Do You Dig National Parks?' File 2, WAC.

viewers were alarmed at the prospect of Rio Tinto Zinc "despoiling" Snowdonia. and firmly convinced that there was no place for mining in our National Parks. This "horrifying" situation must be widely publicised, it was felt.' Several commenters claimed that the programme opened their eyes and stirred them and made them 'so angry' that their blood pressure rose. 959 Friends of the Earth provided some of the background data for the programme and following the transmission, there was a live studio debate between two RTZ employees and two FoE activists which left the RTZ staff 'fuming.'960 RTZ were ultimately stopped by public outrage, driven largely by local FoE groups which raised the issue's profile across the country. 961 This campaign also represents the diverse nature of environmentalism in the 1970s. During the ECY, the Nature Conservancy held an exhibition in the Geological Museum (now part of the Natural History Museum), with the Museum receiving more than half a million visitors in 1969. The exhibition was on the theme of 'Mineral Extraction and the Countryside,' and later in 1970 toured around Britain. This reflected an issue which Friends of the Earth were concerned with when they campaigned against RTZ.962

Perhaps with a touch of irony, an advert in *The Times* in 1971 from Rio Tinto Zinc discussed RTZ's projects around the world and also had a section on 'Concern with the Environment' as well as carrying the headline-quote "Natural resource companies have special responsibility ... not to destroy the environment." Quoting the chairman and chief effective Sir Val Duncan, it claims that the environment 'is not only of very great importance to RTZ but also to the

⁹⁵⁹ Ibid.

⁹⁶⁰ Lamb, *Promising the Earth*, p. 52.

⁹⁶¹ *Ibid*, p. 53.

⁹⁶² The Natural Environmental Research Council Annual Report, 1970, p. 28, FT6/15, TNA. Today, the Geological Museum is part of the Natural History Museum, London: http://www.nhm.ac.uk/visit-us/history-architecture/geological-museum/index.html – accessed electronically 25 March 2014.

United Kingdom and other countries with actual or potential mineral resources.'963
Ever since the Industrial Revolution began, 'there has been a progressive pollution of air and water; a progressive destruction of beautiful countryside ... throughout the industrial world.' Duncan continues that 'the process of drilling ... does not spoil the countryside at all, and if unsuccessful there is virtually no physical evidence of the drilling having taken place.'964

As journalist Pearce Wright noted in 1972, Friends of the Earth was 'the most effective pressure group ... since the halcyon days of Shelter under Mr Des Wilson.'965 In less than two years after becoming established in Britain, Friends of the Earth participated in a wide number of campaigns – from wildlife protection to pollution, and from packaging to drilling and mining. At the UN Environment Conference in 1972, a Foreign Office official described Friends of the Earth as being regarded by the British government "as a responsible and thoroughly well informed organisation, if a bit embarrassing." This was something the group strove towards; a reputation as a 'responsible' pressure group. Their support of Commitment's protest in central London in December 1971 was such that, whilst supporting the protest's aims, Friends of the Earth did not actively engage in the protest.

FoE, therefore, was an 'activist' group in the sense of TEC and SOC'EM, participating in the environmental debate outside the political arena but was not engaged in active demonstrations to meet their goals. Their appearance here has been brief, but ultimately, they were a proactive group, founded not as the

⁹⁶³ Advert, "Natural resource companies have special responsibility ... not to destroy the environment", extracts from Sir Val Duncan's speech, *The Times*, Friday 21 May 1971, p.

⁹⁶⁴ Ibid.

⁹⁶⁵ Pearce Wright, 'Environment: Friends of the Earth exert more pressure', *The Times*, Thursday 29 June 1972, p. 4.

⁹⁶⁷ Interview with Victor Anderson, 3 May 2012.

response to a particular event or concern but as a result of the more general response to environmental destruction which proliferated at the time. Whilst the environmental movement is not defined by the presence of proactive groups, it was during the period when environmentalism consumed conservationism that such groups began to appear, with the Conservation Society being an example.

Conclusion

Highlighted in this chapter, a period when the environmental movement existed, have been some of the ways in which environmentalism continued to grow and develop in Britain in the first five years of the decade, through the European Conservation Year, a continent-wide initiative to educate and inform citizens about environmental problems; the first international convention on environmental issues in Stockholm; the publication of 'A Blueprint for Survival'; the creation of PEOPLE, an ecological political party; and the television series *Doomwatch* and *Doctor Who*. The former programme in particular had an effect on the British public, with viewers commenting it was realistic and described events which could happen. This chapter has also discussed the growth and appearance of new environmental-activist groups. Those consciousness-raising publications, events and activities which occurred in the previous decades as well as in the 1970s, inspired new groups to emerge.

The pressure groups analysed here were largely grassroots pressure groups. TEC was launched at the beginning of the 1970s, in response to the popular BBC series *Doomwatch*, and became involved in local campaigns with other groups like SOC'EM. NIMBYs in particular are grassroots organisations because they deal with an immediate local concern. SOC'EM was established as a NIMBY to oppose a stretch of urban motorway being planned to be built through

the Jesmond area of the city. Their anti-motorway campaign against this section of the motorway was successful although other plans to curtail the construction of the entire motorway network in Newcastle and the surrounding areas, including Gateshead, proved ultimately unsuccessful. Nevertheless SOC'EM was an early anti-motorway group whose scope received international attention with their motorway report being request by institutions in Canada and South Africa, as well as those spread across Britain.

Commitment was a non-violent direct action group which held a protest in London in December 1971 and another in 1973 opposing the priority of motor vehicles over pedestrians in central London, in addition to wider issues of air pollution and the blight cars do to the environment. Whilst their protests were unsuccessful and involved only a small number of people, they were undertaking direct action at a time when few other groups were, relating to the environment. The closest organisation which undertook similar action, Friends of the Earth, wanted to remain respectable so whilst supporting Commitment, did not actively engage in the forms of protest Commitment practiced. Through these events and groups, by 1975 the environment was central to British life and society and had a place within and outside the political arena. FoE appeared in Britain because by the early 1970s the general public were becoming more alert to environmental issues. Friends of the Earth's bottle campaign did influence groups such as SOC'EM and some members of SOC'EM were involved with FoE. They all formed broad networks with other pressure groups and organisations, and thus were indicative of the environmental movement existing at this time.

The environmental movement existed in Britain in the 1970s. Broad networks formed between pressure groups, such as Friends of the Earth,

Tyneside Environmental Concern, and SOC'EM; between SOC'EM and

Commitment; between Commitment and Friends of the Earth. In the North East region, the number of environmental groups was such that an environmental information service was established to co-ordinate information for all the groups. 968

In Chapter 1, it was noted that studying social movements by either using resource mobilisation theory or political process theory does not give definitive answers to why and how social movements function. Whilst this work has not been concerned primarily with the function of the environmental movement, and it has been the influences on the movement that have been discussed in some detail, nevertheless these influences appeared in a changing political climate — increasing numbers of television sets in British homes (evidence of consumerism); disasters such as the great smog of London and the *Torrey Canyon*, giving the public examples of environmental destruction; pressure groups such as WWF who sought to educate the public in conservation issues; and more radical ones which appeared out of this. Both the resources which early pressure groups used (like the NSAS working with politicians, and their diverse membership meaning they had widespread support), and the climate within which they existed allowed for the environmental movement to emerged when it did in 1970s Britain.

In studying the political process in which the movement appeared, the previous 25 years were important in creating the conditions within which the movement appeared. The creation of the Environment Department, PEOPLE, the ECY and the UN Conference were all evidence of the environment entering the political mainstream. The time was right, therefore, for new radical groups to emerge to work with, oppose or pressure the government to do more. The Conservation Society was already at work, but was now joined by new activist-

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⁹⁶⁸ Many of the papers of SOC'EM include discussion of, or newsletters from, the environment information service. Don Kent also mentioned it in his interview – Interview with Don Kent, 10 April 2012.

groups which cared less for tradition and more about grabbing headlines and winning hearts and minds. The resources of particular groups were also important – SOC'EM's popular motorway report was written by experts in law and urban planning and its leader had experience in public relations; TEC, like SOC'EM had experts and wanted to question science and standard wisdom relating to the environment and economic growth; FoE was media savvy and successfully managed to exploit their bottling campaign, as well as touching the public's psyche with their opposition to RTZ mining in Snowdonia; Commitment's resources were largely its radical action. Lacking a sophisticated membership base and structure, instead they engaged in direct action.

These resources both helped and hindered these groups – FoE was not successful in forcing Schweppes to reverse their bottling decision but were far more successful in their media profile; SOC'EM succeeded in preventing the motorway construction but almost immediately lost some of its reason for existing; TEC was only small and whilst doing good work in Newcastle, had little impact further afield (their importance is as evidence of the success of *Doomwatch*, being founded as a direct result of it). Commitment was not successful, did not last long, and made little political impact. From this, it is clear that the resources of groups did go some way to affect the success of groups; however, these groups also only existed because of the political and social environment was right for them. For instance SOC'EM only appeared because the political climate was such that it allowed such a group to exist as an anti-motorway group; had there not been the plans in place to construct the motorway it is questionable whether SOC'EM would have appeared. Similarly, if *Doomwatch* had not aired nor been successful, TEC might not have been established.

'We are all conservationists now' might have been an accurate comment to make in 1970. But, as conservationists existed in the 1950s with the Nature Conservancy and concern about litter and river pollution, in the early 1960s with WWF and the National Nature Weeks, and in the later 1960s with the *Torrey Canyon* and Cow Green, this was a culmination of ideas. What this chapter sought to achieve, was reveal how the issues discussed in previous chapters, culminated into the emergence of the environmental movement in the 1970s.

Chapter 6 - Conclusion

The starting point for this project was a statement by Prime Minister Harold Wilson designating the environment the top priority for government in the 1970s. A priority shared by Richard Nixon, who also described the 1970s as the 'decade of the environment.⁹⁶⁹ This is largely correct and based on the existing historiography of post-war Britain and of the environmental movement in 1970s Britain it is easy to see why this period is viewed as such. Yet as social scientist Horace Herring states, 'It would be a great mistake to think that there was little "environment" awareness' before the 1970s. 'It was just that the concept ... of the "environment" was not known. Some people then were concerned, often passionately, about ... pollution control, access to the countryside and ... wildlife/nature conservation.'970 As René Descartes suggested long ago that we "render ourselves the masters and possessors of nature" and Francis Bacon that we "extend the power and dominion of the human race itself over the universe," this thesis has sought to document some of the ways in which those who cared for the natural world tried to nurture and improve the environment and influence the public in best practice. 971 In doing so, it provided ideal conditions in which the 'decade of the environment' could come to fruition.

Although this work has focused on the inception of environmental ideas in post-war Britain and how these fed into the environmentalism of the late 1960s and the environmental movement of the 1970s, rather than a detailed analysis of the movement itself, some comment can be made with regards the two theoretical approaches towards studying aspects of social movements, as described in Chapter 1, notably resource mobilisation theory (RMT) and political process theory

See Sussman & Daynes, 'Spanning the Century', p. 308.
 Herring, 'The Conservation Society', p. 384.
 As quoted in Winner, *The Whale and the Reactor*, p. 123.

(PPT). Often, this work has argued that pressure groups – such as the NSAS – appeared (or grew in support) in an atmosphere of 'change' factors (as the PPT argument states) – that is the conditions were right for these to exist in. As Max Nicholson considered, it was through no accident that the 1970s saw much horror and trepidation regarding the environment, when placed in the context of previous years. 972

This context can be observed throughout the project notably through the NSAS; through the NC (appearing at a time of 'new' Britain following the end of the war); through the WWF; through the TDC, established specifically in defence of Teesdale and against the reservoir at Cow Green (which itself can be placed in the context of industrial development of post-war Britain); and with PEOPLE, there was a real concern following the publication of 'Blueprint,' *Limits* and *The Population Bomb* which caused some to decide political action was required to save the planet, and that as of that moment the main political parties had not done enough to protest the environment. Yet the party, electorally, was largely unsuccessful. Nevertheless they did raise the political stakes for the other mainstream political parties to focus on environmental issues and raised the problem with the public's consciousness.

Analysis of the resources of groups, has also occurred, through groups like the NSAS which made use of its diverse membership structure; WWF (notably with the Wildlife Youth Service); with the Conservation Society; and with Friends of the Earth. And in the case of SOC'EM, this group's leader, Alan Brown, was 'a PR man' who knew how to exploit the media which the group successfully did,

⁹⁷² Nicholson, *The New Environmental Age*, p. 110.

whereas Commitment had no strong leadership, with confusion amongst some activists in the protest in December 1971, as to what has happening.⁹⁷³

Whilst there is some overlap between both, neither has been the central focus of this work; instead, as noted in Chapter 1, Christopher Rootes' concept, the environmental movement being a broad network of people and organisations engaging in collection action in pursuit of environmental goals, works well in this project in part because it does not focus on a particular aspect of pressure groups and the movement, but instead is useful in this chronological approach investigating the movement's developmental stages. All the case studies in this work chronicle this development, through analysing pressure groups and consciousness-raising activities such as exhibitions and television programmes. Above all, the post-war period marked a growing sense of pride in the natural environment of Britain, and a sense of trepidation that it was being destroyed.

Anyone watching the opening ceremony of the Olympic Games in London in the summer of 2012 would have observed how the natural environment is part of the British psyche, with Britain depicted as a 'green and pleasant land.'974 The ceremony then displayed mills and smokestacks, imagery of the Industrial Revolution. The major environmental trends which had begun during that period were accelerated during the Second World War. Whole sectors of the consumer economy were placed on hold. Millions of Europeans experienced ruined environments, destroyed infrastructures and reduced food supplies as well as lowering standards of water purity. In Britain, it was in this period that 'the smiling

⁹⁷³ Interview with Don Kent, 10 April 2012.

⁹⁷⁴ See Owen Gibson, 'Danny Boyle's Olympic opening ceremony: madcap, surreal and moving', *The Guardian*, Saturday 28 July 2012, p. 2 – http://www.theguardian.com/sport/2012/jul/27/olympic-opening-ceremony – accessed electronically 11 July 2014.

countryside' acquired a new value, featuring in propaganda as something British soldiers were fighting to save.⁹⁷⁵

The prevailing atmosphere at the end of the war was that it was a time of opportunity to improve people's health and living standards after the destruction of the war years and the on-going period of austerity. This feeling also enabled the improvement of the quality of life to feed naturally into this atmosphere. As a result, in post-war Britain, everything that was good about the country – the natural environment (something considered 'central to the national character') – would be made available to all to use and enjoy. This popular desire to see and experience nature was reflected in the creation of the Nature Conservancy and the passing of the National Parks Act. As people visited the natural world, they observed the beauty of it, but also saw the destruction of it. This environmental devastation left a deep impact on British society, argues Tamara Whited and others, with the 'despoiling' of the countryside becoming an important post-war concern, as observed in previous chapters.

However, it is not enough, Paul Ward contends, to say that only rural issues comprise an image of Britain. By the beginning of the twentieth century four out of five citizens lived in towns. 'In a British context ... it is fair to say that the urban as well as the rural has been celebrated as contributing to the national identity. The tranquillity offered by the countryside has figured in the versions of political moderation associated with the British national character, but so too has the

 ⁹⁷⁵ Tamara L. Whited, Jens I. Engels, Richard C. Hoffman, Hilde Ibsen & Wybren Verstegen, Northern Europe: An Environmental History (Oxford: ABC-CLIO, 2005), pp. 128, 133-134, 149-151. 'The smiling countryside' is quoted on p. 149.
 ⁹⁷⁶ Ibid, p. 151; the countryside is described as 'central to the national character' in Paul

Ward, Britishness since 1870 (London: Routledge, 2004), p. 57.

⁹⁷⁷ The 'despoiling' of the countryside is mentioned in Ward, *Britishness since 1870*, p. 65. See also Whited et al, *Northern Europe: An Environmental History*, pp. 146, 149-151.

dynamism of urban life.'978 National identity has therefore evolved from both rural and urban issues. In this project, both rural and urban environmental problems have been assessed, often through analysing different types of pollution.

Pollution is indiscriminate; it does not target one specific area; rather seeps and spreads across the environment through the air, water and ground. Many of the early pressure groups discussed in this work were single issue groups concerned with a particular pollution or environmental problem. Yet these issues where not necessarily simply local or national concerns. As noted in Chapter 2, London was not the only British city to experience smog, nor was Britain the only industrial country to have this problem; the telegram from the mayor of Pittsburgh to the mayor of Sheffield on the opening of the Clean Air exhibition in the latter city reflects this. 979

How 'British,' then, were these issues? Other topics discussed here, such as oil spills, happened in other parts of the world (two years after the *Torrey Canyon*, the Santa Barbara oil spill occurred off the Californian coast). Even SOC'EM, with local residents complaining about a motorway which would 'despoil' their local area, was internationalised, with requests for its motorway report from Canada and South Africa. In some regards, Britain followed the United States, with Friends of the Earth and Greenpeace (not established in Britain until 1977) launched in North America first, before being transplanted here. The growth of television also helped internationalise environmental issues. Moreover, the UN

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⁹⁷⁸ Ward, *Britishness since 1870*, pp. 54, 66 (quote appears on p. 66).

⁹⁷⁹ The telegram is mentioned in the report by the Public Health Department in Sheffield on the Clean Air Campaign. See Sheffield Public Health Department, 'Report on the Clean Air Campaign', December 1959, p. 5. SY11/1 – Clean Air Campaign, 1959, SCA.

Campaign', December 1959, p. 5, SY11/1 – Clean Air Campaign, 1959, SCA.

980 See Rome, "Give Earth a Chance", for more on the development of American environmentalism in the 1960s.

Conference and European Conservation Year (ECY) both reveal the internationalisation of environmental issues in the early 1970s.

Yet Britain was also a world leader. The ECY was inspired directly by the British 'National Nature Weeks' and the 'Countryside in 1970' conferences; the government passed the world's first Clean Air Act in 1956; and WWF, although an international pressure group, was founded by British conservationists. In January 1972, just before the publication of 'A Blueprint for Survival,' Paul Ehrlich, President of the Conservation Society, gave his Presidential Address to a crowded hall in Westminster. 'A massive contribution to environmental sanity could be made by Britain,' he said. Britain was often looked upon by much of the world 'for intellectual and political leadership.' High on his list of measures essential to safeguarding the environment was the restriction in the size and number of cars, which he described as "resource sinks". '982

The creation of the Nature Conservancy is also evidence of Britain's independent environmental concern. The NC was a British organisation, and, whilst scientists looked towards America with regards national parks, the context within which they appeared was different. The American sense of wilderness was not and is not as prevalent in Britain. Even the so-called 'book that launched the modern environmental movement,' *Silent Spring*, had a different reception here, not because its message was any less important, but because scientists were already aware of the problems of pesticide use and had some measures in place to deal with them. In Britain, in the 1950s, pesticides were used to coat seeds

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⁹⁸¹ Meredith Veldman also describes how Britain developed an independent environmental consciousness to that of the United States. See Veldman, *Fantasy, the Bomb and the Greening of Britain*, p. 206.

⁹⁸² Paul Ehrlich is quoted in Pearce Wright, 'Britain could lead population curb with a target of 30 million, US professor says', *The Times*, 15 January 1972, p. 2.

Timothy O'Riordan mentions this fact – see O'Riordan, 'Public Interest Environmental Groups', p. 417.

before planting; birds would dig these up, eat them, and die. This led to a ban on seed dressing in the spring (when they ate them) but not in the autumn (when they did not). As Frank Graham Jr. considers: 'When similar damage had been uncovered in the United States, the agri-chemical interests usually had denied the existence of a problem, or have shrugged it off as being justified by cost/benefit considerations. Once the facts were clear in England, however, no segment of society shirked its responsibilities. Few individuals were deceived by the specious "birds or people" argument.'984

In post-war Britain, rising affluence and consumerism, as elsewhere, began a new pollution regime, when consumers drove cars, sullied waterways and destroyed the natural world. 985 With improvements in working conditions and the creation of the welfare state, 'quality of life' issues were raised in society with regards living standards. In addition, the media revolution, seen through analysis of nature conservation television programmes in the previous chapters, meant more of the public were conscious of and informed about environmental problems. Environmentalism emerged in this context in the later 1960s, when the detritus of affluent living threatened to destroy the values from which individuals lived their lives. This is observed through Cow Green, where conservationists clashed with industrialists for the heart of the countryside. The controversy surrounding this issue posed the question, 'if industrial development was allowed to take over there (at Cow Green), then where next?' This detritus was also witnessed in the *Torrey* Canyon disaster. Holidaymakers saw first-hand the result of society's dependence on oil and technological development. As news reports of the stricken tanker were viewed with horror in homes across the country, the lasting images were of birds,

⁹⁸⁴ Graham Jr., Since Silent Spring, pp. 83-84.

⁹⁸⁵ Whited et al, *Northern Europe: An Environmental History*, p. 143; Lamb, *Promising the Earth*, p. 25.

covered in oil. It marked a turning point in post-war environmental concern, with organisations such as the Conservation Society no longer merely argued against pollution but also criticised the society responsible. As Philip Lowe and others note, this 'marked the beginning of a more holistic approach to the countryside.'986

By the end of the period this work deals with, environmental activists had begun to turn the theme of the 'decline of Britain' on its head, indicating that the slow economic growth was a sign Britain refused to join the international race for destruction. 'In Britain,' Meredith Veldman states, there was the belief by some that 'a set of values survived that could enable the island to lead the rest of the world into a sustainable future. Patriotism, at times a "Little Englander" nationalism,' wove its way through society, with groups like SOC'EM,

Commitment, the Conservation Society; publications such as 'A Blueprint for Survival'; and the political party PEOPLE, emphasising local, decentralised control and communities. These reflected 'a concern to preserve and protect essential British or English characteristics.'

Many of the issues which were the focus of early post-war environmental concern – air pollution for instance – resurfaced later and were further developed by the radical pressure groups of the early 1970s. By ignoring events of 1945-1970, which form the majority of this thesis, an important part of post-war British history remains hidden. From the case studies above, it is clear that the inception of the environmental movement was rather the result of an incremental process as

⁹⁸⁶ Philip Lowe, Jonathan Murdoch & Andrew Norton, *Professionals and Volunteers in the Environmental Process* (2001), p. 9 – http://www.ncl.ac.uk/cre/publish/Books/CPREfinal.pdf – accessed electronically 24 January 2014. See also Rawcliffe, *Environmental Pressure Groups in Transition*, p. 26.

Veldman, Fantasy, the Bomb and the Greening of Britain, pp. 4, 244, 306, 310. There is a long history of conservative or right-wing groups or political organisations being 'environmentally aware', both in Britain and in the rest of the world. This project has not focused on party politics much, but for more information see Derek Wall, 'Darker Shades of Green', Red Pepper, August 2000 – http://www.redpepper.org.uk/darker-shades-of-green/ – accessed electronically 21 February 2014.

a series of events triggered new responses to the environment in the post-war period. Those environmental ideas which developed, then increasingly became more radical and inclusive as the decades progressed. The popularity of organisations such as the WWF and television programming like *Zoo Quest* and *Look* reflect some of the diverse influences on the movement. 'Blueprint' epitomised these issues, describing much of the previous 25 years of environmental concern. In doing so it demonstrated how environmental problems were interrelated and provided evidence of how to work towards a more sustainable society. By 1975, the environment had been fully absorbed into popular culture, partly through programmes such as *Doomwatch* and *Doctor Who*. The impact of the environment on society had reverberated far beyond its more individualistic, post-war base. As *The Guardian* claimed, 'We are all conservationists now.'988

By looking beyond the traditional narrative of environmental movement development, this thesis fills a gap in current environmental movement historiography; because of the lack of detailed analysis of post-war environmental ideas, this work has also illustrated that the movement's development occurred in the post-war period through concern about the natural world, wildlife and pollution. This work is equally significant as it assesses notable historical issues from an environmental stand-point, drawing out environmental aspects of events, such as the great London smog. As noted in Chapter 4, many parallels were made between the Deepwater Horizon accident and the *Torrey Canyon* and in almost every oil spill since, the *Torrey Canyon* has been mentioned in some way. This project, then, has been an original contribution to knowledge, analysing pressure groups and events which had not been previously discussed. To ignore or play

⁹⁸⁸ Swift, 'How conservation came to town', p. 8.

down the previous two decades before 1970 ignores rich examples which show that there were many influences on the movement and environmental beliefs of society in the 1970s.

Analysis of *Silent Spring* is a further example of the originality of this project because little exists from a historical point-of-view with regard to its reception in Britain. Therefore, any evaluation of the book is relevant. Through the analysis of Carson's work, it was stressed that the book's impact in Britain was different than that which it had in the United States for one primary reason – that environmental ideas it promoted were already in use in Britain and so Carson's work was not the shock doctrine which is proved to be elsewhere. The Nature Conservancy and the Council for Nature had done much to mitigate the book's impact. As evidence of environmental awareness before the 1970s one need only look at the raison d'être of the Council – established to inform and educate people about environmental ideas.

This project has underlined the importance of case studies in an investigation such as this. There is not enough space to deal with every issue or activist group present in the period covered. The case studies have been chosen because they reveal the changing public opinion and the growth of the environmental consciousness, and sometimes deal with issues or groups which have hitherto not been recorded or analysed. They are perhaps the best examples of the growth of an environmental consciousness in post-war Britain. They have also provided examples of environmental activism through studying pressure groups which emerged or were active in the post-war period.

Were these pressure groups successful? The measure of their success is not so much what they achieved in relation to specific environmental issues

(although obviously this was important); rather it is that they existed at all. Some groups – such as the Teesdale Defence Committee or Tyneside Environmental Concern – represent a response from ordinary people to a perceived environmental problem. Friends of the Earth actually failed in their aim of getting Cadbury-Schweppes to stop producing non-returnable bottles, but the publicity garnered from this far outstripped their failure. Success can also be measured in less concrete terms, because although FoE failed in their immediate aims, the media response was far more than they could have imagined. Their tactics were also simulated by other groups such as SOC'EM. In a wider context, therefore, FoE was successful in raising environmental issues in public.

Moreover, the fact that people – and there were many people – on their Easter holidays, felt the need to go and assist with the clean-up of Cornish beaches in the wake of the *Torrey Canyon* emphasised that people cared, often passionately, about nature and the fate of the natural world. As noted in Parliament in the 1950s, concern about the pollution of rivers was such that it was an issue raised by MPs and the problem was legislated against. It is unlikely this would have happened had there not been pressure put on MPs by their constituents.

Many of the pressure groups analysed in this work have been reactive groups, appearing in response to a particular issue (such as the World Wildlife Fund, appearing in response to a call to action regarding the state of African wildlife, or the Teesdale Defence Committee, to protest the plans at Cow Green). Whilst reactive groups still existed in the 1970s (SOC'EM is a reactive group), they were also joined by more proactive organisations, whose appearance was not triggered by a particular issue but concern for the environment in general. The Conservation Society was one such group, the first 'environmentalist' group, with

inclusive policies in relation to the environment. Friends of the Earth were another. Even SOC'EM sought the betterment of Newcastle, and did not fold or disappear after they succeeded in their campaign against the motorway in Newcastle. It is useful to note, however, that there was not always a direct correlative relationship between the growth of consciousness and activism. The *Torrey Canyon* disaster, perhaps more than any event of the entire 1960s, increased environmental awareness in Britain yet no activist group was formed as a direct result. However the Conservation Society did take up the anxiety about oil pollution and saw its membership numbers rise into the early 1970s.

By their coverage of environmental issues, journalists often found themselves converted to supporting the causes they reported and sought to educate their readers. When studying papers in the BBC Archives from the 1950s, for example, it is apparent that series such as Nature Parliament had clear education roles, and involved children and young people as part of the programme. The debates surrounding clean air in the 1950s were targeted at educating and informing key sections of society. These included women – who would be using a lot of the coal which was responsible for the smog disaster – and children. School children were employed to conduct experiments measuring the levels of pollution present in the atmosphere. Similarly, children were targeted in the anti-litter campaigns of the 1950s, through youth groups such as the Woodcraft Folk, and through a push for nature conservation. Conversely, children became heavily involved with the clean up after the *Torrey Canyon* sank. It was an event dubbed a "modern children's crusade." In the early 1970s, as part of the European Conservation Year, children engaged in monitoring pollution levels and released balloons to launch a survey into air pollution. Young people were also

⁹⁸⁹ Cowan, Oil and Water, p. 127.

targeted in the run up to the first United Nations Conference on the Human Environment in 1972, with one of the four working parties established by the Department of the Environment focusing specifically on young people and environmental issues. 990 The regularity at which this thesis cites education drives towards children and young people reveals a growth in the environmental consciousness in the post-war years. These children were reaching adulthood in the 1970s and had already been primed to espouse the environment. It also emphasises the importance organisations and indeed the government placed on the education of the citizens of the future.

In a recent New Scientist article, published to coincide with the fortieth anniversary of Limits to Growth, Debora MacKenzie questioned whether in the twenty-first century, society should really believe in anything created by computer simulation, when, at the time that *Limits* was first published, computers were about the size of fridges and less powerful than a mobile phone today. 'Surely we now have far more advanced models?' she asks. 'In fact, in many ways' the computer model on which the findings of *Limits* was based, World3, has yet to be improved. 991 This re-assessment of *Limits* in time for its fortieth birthday is indicative of what this project has tried to do. It has sought to reinterpret the development of the environmental movement in Britain after the Second World War, born at the start of the 1970s, and contends that this movement was influenced by events of the previous 25 years.

In answering those questions posed in Chapter 1, it is clear through the case studies analysed here, that the 1970s environmental movement was composed of a whole spectrum of pressure groups and beliefs, collectively under

⁹⁹⁰ Aldous. *Battle for the Environment*, p. 36.

Debora MacKenzie, 'Doomsday Book', New Scientist, 7 January 2012, No. 2846, pp. 38-39.

the banner of environmentalism but also individually diverse. These groups ranged from moderate, conservative groups, to more radical direct action ones.

Significantly, the moderate or radical nature of groups does not, in itself, denote whether the environmental movement existed or not. SOC'EM was a moderate group as was Tyneside Environmental Concern. These did not engage in direct action like Commitment. Although when radical groups emerged it was at a time when the environmental movement existed, it was more the adoption of environmentalism as an ideology which can be used to define the appearance of the movement, rather than any particular style of activism.

Why did some pressure groups engage in direct action when others did not? Does this say something about the nature of environmental protest? It is unclear why radical groups emerged in the 1970s and not before. One possible reason is the effect of other social movement protests of the 1960s, which have not been analysed here, like the feminist movement or student protests. Certainly Commitment had taken some inspiration from the Campaign for Nuclear Disarmament, but also looked to protests abroad. Equally, the radicalisation of protests or groups does not necessarily denote how successful a campaign will be. The National Smoke Abatement Society was successful in lobbying the government to pass the Clean Air Act, and in educating the public about air pollution. But this was not a direct action group. Similarly, WWF was also successful in educating the public without engaging in any physical protests. The change in the 1970s might have also come from the more inclusive environmentalism which emerged, allowing organisations to campaign on different issues in different ways. Despite its desire to be a direct action group, it should be noted that whilst Friends of the Earth supported Commitment's demonstration in 1971, they did not engage with them because they wanted to be seen as an

organisation of high standing, one that could be discussed in schools. ⁹⁹²
Furthermore, in Chapter 1, Richardson, Kimber and O'Riordan described the different ways in which organisations could be successful, often depending on the different tactics that they used or the appearance of 'change' factors, events which happened outside the control of the group but which increased the group's appeal.

As environmentalism developed, it does seem that a greater number of pressure groups emerged, many of which appeared not as the result of a particular issue but a more general concern about the fate of the world. Perhaps most significantly, as this thesis has covered a diverse range of different studies which described the development of an environmental consciousness in the postwar period, it is not possible to say one event or television programme or organisation was responsible for increasing this consciousness; instead it was a complex, multiple-strand process with different things working in tandem to raise this awareness.

Finally, when did a movement exist? Using Rootes' definition, the British environmental movement existed from 1970 onwards, when pressure groups formed networks with other groups and organisations. These groups followed an environmentalist ideology which had developed in the later 1960s, moving away from the more singular-issue focused conservationist approach. It is easier perhaps to argue that, as seen through the case studies in this work, the environmental ideas existed in Britain after the war were pollution and nature conservation. Both issues during the 1950s entered the public's consciousness. Conservationism grew in the 1960s, as did a greater public awareness. Then with increasing concern about the destruction of nature in the later 1960s, environmentalism appeared. Harold Wilson mentioning the environment in his

⁹⁹² Interview with Victor Anderson, 3 May 2012.

party conference speech represented a turning point in how environmental issues were viewed in public.

Robert Arvill, head of the Nature Conservancy Council (the successor to the NC) concludes his work on the environment in Britain – *Man and the Environment* – by warning that time is running out to deal with environmental issues.

'Awareness, passion and an urgent determination to act are required of every one of us.'993 This was in 1970. The situation today is no different and we are urged to act before it is too late. Some even think it is already too late and believe we should concern ourselves with damage limitation, rather than prevention. This thesis has traced the evolution of environmental ideas from the end of the Second World War. The issues which arose then are not too dissimilar to those facing the world today, but as climate change appears to be gathering pace, the planet is facing unprecedented challenges. Whether modern society will be able to stand firm against the increasing storms of a changing climate remains to be seen.

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⁹⁹³ Arvill, *Man and Environment*, p. 291.

Appendix

Oral Interview Participants (whose testimony appears in the thesis)

Michael Allaby – a former editor of *The Ecologist*, he was interviewed about 'A Blueprint for Survival', of which he was a co-author. Today he works as an author.

Victor Anderson – A leading member of Commitment, today he works for WWF. He was interviewed about Commitment, to learn more about the organisation.

Michael Benfield – One of the four co-founders of PEOPLE, he was interviewed to understand better the context surrounding the founding of PEOPLE.

Dilys Cluer – a Green Party councillor in Scarborough, she responded to the general email sent to the Green Party. She spoke about her life and what influenced her with regards the environment.

John Horam – ex-MP for Gateshead West, he was interviewed about the planned motorway development to be built through Newcastle in the early 1970s, which SOC'EM and others opposed.

Sandy Irvine – Currently Chair of Newcastle Green Party, he responded to the general email sent out to the Green Party asking for volunteers to be interviewed. Spoke about growing up in post-war Britain and the effect of the environment on him.

Don Kent – A former member of SOC'EM, Friends of the Earth Tyneside, and involved with Commitment, he was interviewed about SOC'EM and the motorway protest. He works in the transport sector today.

Brian Milton – interviewed via email about Commitment, which he was involved with/co-founder of.

Ken Pollock – interviewed via email about TEC, an organisation of which he was co-founder. Today he lives in Worcestershire.

Prince Philip – declined a request to be interviewed in person, but did respond in writing to some questions I sent him about the environment and what got him interested in it.

Christopher Rootes – interviewed via email about his concept of the environmental movement. Professor of Environmental Politics at the University of Kent.

Lesley Whittaker – interviewed via email about PEOPLE, of which she was a cofounder.

Maureen Wroe – A Lancaster Green Party member, Maureen responded to the general email sent out to the Green Party asking for volunteers to be interviewed. She was active in post-war Britain and was interviewed about her early life and her involvement in environmental issues.

BIBLIOGRAPHY

PRIMARY SOURCES

Archives

BBC Written Archive Centre, Caversham, Reading (WAC)

Audience Research Report for *Zoo Quest* – 'Dragons for Komodo', *Zoo Quest* – Indonesia 1956, T6/439/1, WAC.

Doomwatch – Book Publishing, R43/998/1, WAC. Davis's comment appears in Commissioning Brief from G. Davis for story 'Your Body Will Never Forgive' (Second Series episode 27), T48/333/1 – Malcolm Hulke (Drama Writer's File), WAC.

Doomwatch episode 'Survival Code', originally aired 11 May 1970, R9/7/105 – Audience Research Reports – Television – General Chronological May & June 1970, WAC.

Doomwatch episode 'The Human Time Bomb', originally aired 22 February 1971, R9/7/109 – Audience Research Reports – Television – General Chronological January & February 1971, WAC.

Doomwatch episode 'The Logicians', originally aired 15 March 1971, R9/7/110 – Audience Research Reports – Television – General Chronological March & April 1971, WAC.

Doomwatch episode 'The Plastic Eaters', originally aired 9 February 1970, R9/7/103 – Audience Research Reports – Television – General Chronological January & February 1971, WAC.

Doomwatch Manuscript, 'Doomwatch: The World in Danger', based on the television programmes by Kit Pedler and Gerry Davies, edited by Gordon Walsh, R43/999/1, WAC.

'Government Go-Ahead for Global', in T65/71/1 – The Green Death, WAC.

Letter from Malcolm Hulke to the BBC, 5 July 1965, in response to their rejection of his play 'The Water', T48/333/1 – Malcolm Hulke (Drama Writer's File), WAC.

Letter from Head of Television Administration Department to Sales Manager at Gamlen Chemical Company, 29 June 1973, in T65/71/1 – The Green Death, WAC.

Letter from Sales Manager at Gamlen Chemical Company to the BBC, 25 June 1973, in T65/71/1 – The Green Death, WAC.

Memorandum about *Nature Parliament* from Head of Programme Contracts to Head of West Regional Programmes, RCONT1 – Talks – Peter Scott, File I 1936-1954, WAC.

Memo from Barry Letts (Producer) to Don Shaw regarding newspaper article for *Doctor Who* story 'The Green Death', 9 March in T65/71/1 – The Green Death, WAC.

Memo from Editor of BBC Natural History Unit, Bristol, Nicholas Crocker, to Head of West Regional Programmes, concerning the special 'Living with Nature' episode of *Look*, 18 February 1965, WE8/541/2 – West Region (Bristol) Sir Peter Scott, 1964-1967, WAC.

Neil Iliff, deputy Chairman of Shell UK, 'Industrial Technology and Conservation', delivered on 17 November 1970 reprinted in 'Chemistry and Industry', *The Society of Chemical Industry* leaflet, 13 February 1971, p. 186, WAC.

Programme scripts, Zoo Quest – Sierra Leone (Zoo Quest 1), 1953-1959, T6/444/1, WAC.

'Project Clean Up' and 'Cleaning up the City', Around Scotland: Looking After Your Environment (1973-1976), SC118/270/1, WAC.

Publicity - Zoo Quest Party Game, 1957-1965, R44/812/1, WAC.

Schools Television: New Horizons – Science & Survival (Industry and the Environment) T69/36/1 – Programme 3, Spring Term (File 2), WAC.

'The Smoke Menace', Second Enquiry – Smog, T32/1,571/1, WAC.

Cambridge University Library, Cambridge (CUL)

Papers of Sir Peter Scott, GB0012:

Anon, 'Dr Ehrlich outlines blueprint for survival', *The Church of England newspaper*, 21 January 1972, newspaper cuttings, A.748, Papers of Sir Peter Scott, GB0012, CUL.

CBI Conference on 'Technology and the Environment', 22 September 1970, G.30, Papers of Sir Peter Scott, GB0012, CUL.

Copy of lecture given by Peter Scott 'The Message Must Go On', n.d. likely to be late 1960s/early 1970s, G.36, Papers of Sir Peter Scott, GB0012, CUL.

'Correspondence', August 1962, C.1492, Papers of Sir Peter Scott, GB0012, CUL.

Edwin Diamond, 'The myth of the "Pesticide Menace", magazine article, n.d., likely to be 1963, M.861, Papers of Sir Peter Scott, GB0012, CUL.

Information on the International Union for the Protection/Conservation of Nature, C.1145 and C.1146, Papers of Sir Peter Scott, GB0012, CUL.

Leaflet on the International Union for the Conservation of Nature and Natural Resources (IUCN), C.1445, Papers of Sir Peter Scott, GB0012, CUL.

Leaflet 'UN Conference on the Human Environment 1972 – Memorandum from the Conservation Society to the Secretary of State for the Environment' (1971), G.39, Papers of Sir Peter Scott, G0012, CUL.

Leaflet 'Your chance to take action for survival', G.39, Papers of Sir Peter Scott, GB0012, CUL.

'Look No. 3: "Land of the Flamingo", programme synopsis and running order', F.20, Papers of Sir Peter Scott, GB0012, CUL.

Look - This is National Nature Week, F.40, Papers of Sir Peter Scott, GB0012, CUL.

Max Nicholson, Draft of General Report 'The Countryside in 1970', Mark III, C.888, Papers of Sir Peter Scott, GB0012, CUL.

Object of Programme, from Skeleton of proposed BBC television *Look* programme for Nature Week, F.40, Papers of Sir Peter Scott, GB0012, CUL.

Pamphlet, 'How can we bathe our fish in this?' C.1446, Papers of Sir Peter Scott, GB0012, CUL.

Press release, 9 September 1966, M.1178, Papers of Sir Peter Scott, GB0012, CUL.

Quote taken from Anon, 'Safeguarding the environment', *The Co-operative Newspaper*, 22 January 1972, newspaper cuttings, A.748, Papers of Sir Peter Scott, GB0012, CUL.

Speech given for the 10th anniversary of the WWF in 1971, G.34, Papers of Sir Peter Scott, GB0012, CUL.

Summary of speeches by Peter Scott at Stockholm, 30 October 1971 'Why, When & Where?', G.36, Papers of Sir Peter Scott, GB0012, CUL.

Synopsis of Look - Living with Nature, F.59, Papers of Sir Peter Scott, GB0012, CUL.

The Conservation Society Newsletter, Vol. 5 No. 4, Sept/Oct 1971, G.39, Papers of Sir Peter Scott, GB0012, CUL.

'The Countryside in 1970' Second Conference – A Review of the Preparatory Studies, 10-12 November 1965, C.889, Papers of Sir Peter Scott, GB0012, CUL.

'The Return of *Look*' by Peter Scott, 1959 or 1960, F.29, Papers of Sir Peter Scott, GB0012, CUL.

Transcript of interview between Max Nicholson and Elspeth Huxley, 3 October 1990, M.2950, Papers of Sir Peter Scott, GB0012, CUL.

Transcript of 'Nature Parliament', 22 May 1951, F.285, Papers of Sir Peter Scott, GB0012, CUL.

Durham Clayport Library, Durham (DCL)

Anon. 'Battle of the fells is over', *The Express* (Stockton edition), Friday 27 January 1967, DCL, L185.

Anon. 'Botanists have to meet a deadline in the Upper Teesdale', *Teesdale Mercury*, Wednesday 12 November 1969, DCL, L185.

Anon. 'Cow Green Bill at the final stage', Newspaper article 3 March 1967, DCL, 628.1/L185.

Anon. 'Farmers told: fight new reservoir', Northern Echo, 17 May 1965, DCL, L185.

Anon. 'Land of Mists', Newspaper article, 14 April 1967, DCL, L185.

Edward Bacon, 'Industry Versus Botany – in Upper Teesdale', *Illustrated London News*, 12 November 1966, p 26, from DCL, 628.1/L185 Pamphlet box.

Michael Ford, 'The Battle for Cow Green: £5,000 appeal versus ICI pledges', Newspaper article, DCL, L185.

Newspaper article, no title, 5 August 1966, DCL, 628.1/L185.

Our Newcastle Staff, 'NEDC Executive all for Cow Green', *Northern Echo*, Saturday 8 January 1966, p 5, DCL, L185.

Jon Tinker, 'Cow Green twelve years on', New Scientist, 4 May 1978, DCL, L185.

The History Centre, Herbert Museum & Art Gallery, Coventry (THC)

Circular from Ministry of Housing and Local Government, 7 July 1960 – Clean Air Act, 1956, the Use of Sticks and Paper in Smoke Control Areas, CCA/3/1/15274/1, THC.

Minutes of Health Committee, CCA/1/5/105, NSAS West Midlands Division, Document 21 (155), THC.

London School of Economics and Political Science, London (LSE Library)

Poster 1 'Respect the Life of the Countryside', Woodcraft Folk/Youth Movement Archives, YMA/WF/73/2/I/15, from LSE Library's collections.

'Relationships with other political parties in Britain', Young Liberals, Box 16, 16/12/1, from LSE Library's collections.

Modern Record Centre, University of Warwick (MRC)

Anon. '...in a green peace.', *Black and Red Outlook*, no. 7, n.d. likely to be 1972/73, p. 6, 758/1/3/14, MRC.

'Close Piccadilly – Saturday 31 March at 3pm, and "All Britain Street Closing", *Proo73*, no. 9, 26 March 1973, p. 49, 758/1/2/26, MRC.

Neal, Walter. 'Ecology party [letter]', newspaper cutting, MSS.50X/4/2, MRC.

Neal, Walter. 'Real standards [letter]', newspaper cuttings, MSS.50X/4/2, MRC.

'Now soil enters the campaign', newspaper cutting, MSS.50X/4/2, MRC.

'PEOPLE Constitution', MSS50.3/1, MRC.

'PEOPLE – Movement for Survival' draft manifesto (1973), MSS50.3/1/1, MRC.

'People papers are in first', newspaper cutting, MSS.50X/4/2, MRC.

'Results', newspaper cutting, MSS.50X/4/2, MRC.

Museum of English Rural Life, Reading (MERL)

D ORD D93 – "Poison by Pesticides", accuses US writer', *International Pest Control* (November/December 1962), pp. 12-13, MERL.

D ORD D95 – George Ordish, 'Silent Spring - sifting fact & fable', International Pest Control (March/April, 1963), pp. 16-18, MERL.

D ORD D97 - Robert White-Stevens, 'The Facts & Fallacies of Silent Spring', MERL.

PEOPLE Papers from Professor Michael Benfield

'A Future for our children, an environment fit for PEOPLE', A Political Statement by PEOPLE, 1973, p. 3, from Professor Michael Benfield, a founding member of PEOPLE.

'A Manifesto for Survival', June 1974, from Professor Michael Benfield, a founding member of PEOPLE.

Colin Fry, 'Facts About the Ecology Party', 1976, p. 1, from Professor Michael Benfield, a founding member of PEOPLE.

When? What? Why? Where? How?' The Ecology Party leaflet, n.d. likely to be 1975, from Professor Michael Benfield, a founding member of PEOPLE.

Sheffield City Archives, Sheffield (SCA)

Clean Air Campaign, 1959, SY11/1:

Sheffield Public Health Department, 'Report on the Clean Air Campaign', December 1959, SY11/1 – Clean Air Campaign, 1959, SCA.

Sheffield City Council (various reports), 1852-1981, CA-VAC/122:

Report from the National Smoke Abatement Society Conference of 1958, held in Llandudno, p. 3, Sheffield and District Clean Air Committee: Minutes and Reports, 6 November 1956-5 May 1959, CA-VAC/122, SCA.

The Conservation Society, MD8037 Acc. 1999/63:

Annual Report – 1971, The Conservation Society, MD8037 Acc. 1999/63, SCA.

Lady Eve Balfour, inaugural address to the Conservation Society, 26 November 1966, The Conservation Society, MD8037 Acc. 1999/63, SCA.

Conservation – The Conservation Society Newsletter, no. 48, January 1974, p. 12, The Conservation Society, MD8037 Acc. 1999/63, SCA.

John Davoll, 'The Conservation Society, 1966-1987: Lessons of a Post-Mortem', The Conservation Society, MD8037 Acc. 1999/63, SCA.

Douglas MacEwan, 'Some Recollections of the Formation of the Conservation Society', Conservation Society booklet, text of address made to the Conservation Society's Annual Conference, 1987, The Conservation Society, MD8037 Acc. 1999/63, SCA.

'Philosophy, Aims, and Proposed Action', Conservation Society leaflet, The Conservation Society, MD8037 Acc. 1999/63, SCA.

Suggested Programme, list of members, July 1966, The Conservation Society, MD8037 Acc. 1999/63, SCA.

Teesside Archives, Middlesbrough (TA)

A.18229/1 (ICI's Industrial Needs) A:

'Growing Demand for Water by the Chemical Industry', ICI Projects, Design and Engineering Department, 13 May 1965.

'Water Supplies on Teesside', ICI Agricultural Division (n.d.).

A.18229/2 (Botanical Opposition) B:

'Letter from Max Nicholson at the Nature Conservancy to the Tees Valley and Cleveland Water Board', 22 July 1965.

Proof of Evidence – A.S. Thomas, research ecologist and consultant, House of Commons Session 1965-1966.

Proof of Evidence – James Frederick Newman, Head of ICI's research section, House of Commons Session 1965-1966.

'The Botanical Treasures of Upper Teesdale', by C.D. Pigott, *New Scientist*, 21 February 1957.

'The Threat to Upper Teesdale – An Appeal by the Botanical Society of the British Isles' (n.d.).

A.18229/3 (Botanical Opposition) B1:

Proof of Evidence – Stanley Gregory, Senior Lecturer in Geography at the University of Liverpool, House of Commons Session 1965-1966.

The National Archives, London (TNA)

'Correspondence with the Duke of Edinburgh about the book *Silent Spring* by Rachel Carson' – 'Letter from Lord Hailsham to Prince Philip', 16 January 1963, CAB 124/1920, TNA.

'Letter from Leslie Osborne, Agricultural & Food Attaché, British Embassy, Washington DC to J.A. Anderson, Laboratory, Safety & Seeds Division', 7 November 1962, TNA.

Nature Conservancy Annual Reports, 1949-1970, FT 6/2, 6/3, 6/4, 6/5, 6/6, 6/7, 6/8, 6/9, 6/10, 6/11, 6/12, 6/13, 6/14, 6/15, TNA.

Review of Present Safety Arrangements for use of toxic chemicals in Agriculture & Food Storage: Implementation of Report: Proposed Pesticides Bill ('Copy of Pesticides Bill, 1968'), Subseries within MAF 284, TNA.

Tyne & Wear Archives, Newcastle upon Tyne (TWA)

'Minutes' from January and November 1975 for mention of South African and Canadian requests respectfully, in SOC'EM Papers, Accession no. 2659, TWA.

'SOC'EM! Mission Statement', Accession no. 2659, SOC'EM Papers, TWA.

Books & Journal Articles

Aldous, Tony. Battle for the Environment (London: Fontana, 1972).

Allaby, Michael. *The Eco-Activists: Youth Fights for a Human Environment* (London: Charles Knight & Co Ltd, 1971).

Arvill, Robert. *Man and Environment: Crisis and the Strategy of Choice* (London: Penguin Books, 1970).

Attenborough, David. *Life on Air: Memoir of a Broadcaster* (London: BBC Books, 2010).

Barr, John. 'Environment Lobby', New Society, 384 (5 February 1970), pp. 209-211.

Barr, John (ed.). *The Environmental Handbook: Action Guide for the UK* (London: Ballantine/Friends of the Earth, 1971).

Carson, Rachel. 'Of Man and the Stream of Time', *Scripps College Bulletin*, Scripps College, Claremont, California (July 1962).

Carson, Rachel. Silent Spring (Boston: Houghton Mifflin, 1962).

Cottam, Clarence & Scott, Thomas G. 'Review: A Commentary on *Silent Spring*', *Journal of Wildlife Management*, 27 (January 1963), pp. 151-155.

Cowan, Edward. Oil and Water: The Torrey Canyon Disaster (London: William Kimber, 1969).

Cox, Peter R. & Peel, John (eds). *Population and Pollution* (London: Academic Press, 1972).

Dickens, Charles. *Bleak House* (London: J.M. Dent & Sons, Ltd, 1960), originally published in 1853.

Dill, Norma H., Haines, Elizabeth M., Hellerman, Joan & Jarvis, Robert A. 'Review: "The Spraying Around Us", *Torrey Botanical Club*, 90 (March-April 1963), pp. 149-152.

Drury Jr., William H. 'Review', *The Auk*, 80 (1963), pp. 209-213.

Ehrlich, Paul. *The Population Bomb* (London: Ballantine, 1969).

Elton, Charles. *The Ecology of Invasions by Animals and Plants* (London: Methuen, 1958).

Friends of the Earth. *The Stockholm Conference: Only One Earth* (London: Earth Island Limited, 1972).

Geminus. 'American Newsletter', New Scientist' 343 (13 June 1963), p. 594.

Geminus. 'It seems to me', New Scientist, 308 (11 October 1962) m o, 85.

Graham Jr., Frank. Since Silent Spring (London: Houghton Mifflin, 1970).

Hawthorne, Nathanial. The English Note-Books (8 December 1857).

Hume, C.W. 'An American Prophetess', Nature, 198 (13 April 1963), p. 117.

Mellanby, Kenneth. 'Effects of Pollution on Wildlife in Britain', in *Population and Pollution*, edited by Peter R. Cox & John Peel (London: Academic Press, 1972), p. 45-52.

Morris, William. News from Nowhere, or, An Epoch of Rest: Being some chapters from a Utopian Romance (Maryland: Wildside Press, 2007), originally published in 1890.

Newborn, Susi. *Bonfire in my Mouth: Life, Passion and the Rainbow Warrior* (Auckland: Harper Collins, 2001).

Nicholson, Max. The Environmental Revolution: A Guide to the New Masters of the World (London: Penguin, 1972).

Oudet, Commandant L. *In the wake of the Torrey Canyon: Reflections on a disaster* (London: The Royal Institute of Navigation, 1972).

Petrow, Richard. *The Black Tide: In the Wake of the Torrey Canyon* (London: Hodder & Stoughton, 1968).

Rowntree, F. St. D. 'Sheffield's Clean Air Campaign', *Health Education Journal*, 60:1 (1960), pp. 25-32.

Sanderson, J. B. 'The National Smoke Abatement Society and the Clean Air Act (1956)', *Political Studies*, 9:3 (1961), pp. 236-253.

Scott, Peter (ed.). The Launching of a New Ark: First Report of the World Wildlife Fund, 1961-1964 (London: Collins, 1965).

Stevenson, Robert Lewis. *The Strange Case of Doctor Jekyll and Mr Hyde* (London: Longmans, Green & co., 1886).

Thompson, Daniel Q. 'Review', The Wilson Bulletin, 75 (1963), pp. 106-107

Thorpe, W.H. 'Letters – Dangerous Complacency', *New Scientist*, 311 (1 November 1962), p. 278.

Vollmar, Fritz (ed.). The Ark Under Way: Second Report of the World Wildlife Fund, 1965-1967 (London: Collins, 1968).

Ward, Barbara & Dubos, René. Only One Earth: The Care and Maintenance of a Small Planet (London: André Deutsch, 1972).

Weit, Frits. 'Review', AIBS Bulletin, 13 (1963), pp. 41-42.

Wise, William. Killer Smog: The World's Worst Air Pollution Disaster (Illinois: Rand McNally and Company, 1968).

Worthington, E.B. 'Reaping as we sow', *New Scientist*, 327 (21 February 1963), p. 425.

Ephemera & Other Sources

'Death in the Air! The menace of air pollution', leaflet, n.d. probably 1956 – http://www.sochealth.co.uk/public-health-and-wellbeing/death-in-the-air-the-menace-of-air-pollution/ – accessed electronically 4 October 2012 (taken from the Socialist Medical Society, now the Socialist Health Society website).

Green CND. 'Embrace the Earth: A Green View of Peace', Green CND Pamphlet (CND Publications Ltd, 1983).

McKay, H.A.C. (ed.). *Oil Pollution at Sea: Studies in Connection with the Torrey Canyon Episode* (Berkshire: UK Atomic Energy Authority Research Group Report – Chemistry Division, Atomic Energy Research Establishment, 1967).

Oral interviews and email correspondence with former activists, interviewed variously between 2011-2013.

Parslow, J.L.F. (ed.). 'News and Comment: Fight for Upper Teesdale Continues', *British Birds*, 59 (1966), p. 390 – http://www.britishbirds.co.uk/search?model=pdf&id=4005 – accessed electronically 29 August 2013.

Playboy magazine, August 1970 for Ehrlich article – http://members.i.playboy.com/Playboy-Magazine-Archive/19700801/page-62 – accessed electronically 24 August 2013.

Questions concerning *Silent Spring* and modern British environmentalism, from the author of the thesis, answered by His Royal Highness Prince Philip, The Duke of Edinburgh, received 29 July 2012.

Hansard

<u>House of Commons Debates</u>; House of Lords Debates; House of Commons Parliamentary Papers (online resource).

Legislation

Agriculture (Poisonous Chemicals) Act, 1952; Clean Air Act, 1956; Countryside Act, 1968; National Parks and Access to the Countryside Act, 1949; Rivers (Prevention of Pollution) Act, 1951; Rivers (Prevention of Pollution) Act, 1961.

Newspapers

Chicago Tribune; Coventry Evening Telegraph; Coventry Standard; Daily Express; Daily Mirror, Daily Telegraph; Evening Chronicle (Newcastle); Glasgow Herald; Illustrated London News; Los Angeles Times; Sheffield Telegraph; Stockton Express; Sunday Express; The Boston Globe; The Cornishman; The Guardian; The Milwaukee Journal; The New York Times; The Observer, The Times; The Washington Post; The West Briton.

Online Repositories

Muther Grumble archive; The Ecologist archive.

SECONDARY SOURCES

Books & Journal Articles

Abercrombie, Nicholas. *Television and Society* (Cambridge: Polity Press, 1997).

Abrams, Lynn. Oral History Theory (Oxford: Routledge, 2010).

Allison, Lincoln. *Environmental Planning: A Political and Philosophical Analysis* (London: George Allen & Unwin, 1975).

Ashby, Eric. *Reconciling Man with the Environment* (Stanford, California: Stanford University Press, 1978).

Bate, Jonathan. The Song of the Earth (London: Picador, 2001).

Beckett, Andy. When the Lights Went Out: Britain in the Seventies (London: Faber & Faber, 2010).

Berry, Robert James. God's Book of Works: The Theology of Nature and Natural Theology (London: T&T Clark Ltd, 2003).

Black, Lawrence & Hugh Pemberton. An Affluent Society?: Britain's Post-War 'Golden Age' Revisited (London: Ashgate, 2004).

Black, Lawrence & Hugh Pemberton, 'Introduction. The benighted decade? Reassessing the 1970s', in *Reassessing 1970s Britain*, edited by Lawrence Black, Hugh Pemberton & Pat Thane (Manchester: Manchester University Press, 2013), pp. 1-24.

Black, Lawrence, Hugh Pemberton & Pat Thane (eds). *Reassessing 1970s Britain* (Manchester: Manchester University Press, 2013).

Blunden, John & Nigel Curry. A People's Charter? Forty Years of the National Parks and Access to the Countryside Act 1949 (London: H.M. Stationary Office, 1990).

Bocking, Stephen. *Ecologists and Environmental Politics: A History of Contemporary Ecology* (London: Yale University Press, 1997).

Bousé, Derek. Wildlife Films (Philadelphia: University of Pennsylvania Press, 2000).

Brookes, S.K. & J.J. Richardson. 'The Environmental Lobby in Britain', *Parliamentary Affairs*, 28 (March 1975), pp. 312-328.

Burt, Jonathan. *Animals on Film* (London: Reaktion Books, 2002).

Buswell, R.J. 'Reconciling the past with the present: Conservation policy in Newcastle upon Tyne', *CITIES: The International Journal of Urban Policy and Planning* (August 1984), pp. 500-514.

Cahill, Michael. The Environmental and Social Policy (London: Routledge, 2002).

Cain, John. *The BBC: 70 Years of Broadcasting* (London: BBC Publications, 1992).

Carnevali, Francesca & Julie-Marie Strange (eds). *Twentieth-Century Britain: Economic, Cultural and Social Change* (London: Pearson Longman, 2007), Second Edition.

Carter, Neil & Philip Lowe. 'Britain: Coming to terms with sustainable development?', in *Governance and Environment in Western Europe: Politics, Policy and Administration*, edited by Kenneth Hanf & Alf-Inge Jansen (Harlow, Essex: Longman, 1998), pp. 17-39.

Clapp, Brian. An Environmental History of Britain Since the Industrial Revolution (London: Longman, 1994).

Coleman, Stephen & Paddy O'Sullivan (eds). William Morris & News from Nowhere: A Vision for Our Time (Devon: Green Books, 1990).

Cooper, Timothy. 'War on Waste? The Politics of Waste and Recycling in Post-War Britain, 1950-1975', *Capitalism Nature Socialism*, 20:4 (2009), pp. 53-72.

Creswell, John W. Qualitative Inquiry and Research Design: Choosing Among Five Approaches (London: SAGE, 2013), Third Edition.

Creswell, John W. Research Design: Qualitative, Quantitative and Mixed Methods Approaches (London: SAGE, 2014), Fourth Edition.

Crowson, Nick, Matthew Hilton and James MacKay (eds). *NGOs in Contemporary Britain: Non-State Actors in Society and Politics since 1945* (Basingstoke, Hampshire: Palgrave Macmillan, 2009).

Coxall, Bill. *Pressure Groups in British Politics* (Harlow, Essex: Pearson Education, 2001).

Culver, Lawrence, Christof Mauch & Katie Ritson (eds). 'Rachel Carson's *Silent Spring*: Encounters and Legacies', *RCC Perspectives* 2012, Issue 7.

Davis, Devra. When Smoke Ran Like Water: Tales of Environmental Deception and the Battle Against Pollution (Oxford: Perseus Press, 2002).

Davis, Mary. Fashioning a new world: a history of the Woodcraft Folk (Loughborough: Hollyoake Books, 2000).

Denzin, Norman K. & Yvonna S. Lincoln (ed.). *The SAGE Handbook of Qualitative Research* (London: SAGE Publications, 2011).

Dryzek, John S. *The Politics of the Earth: Environmental Discourses* (Oxford: Oxford University Press, 1997).

Dryzek, John S., David Downes, Christian Hunold, David Schlosberg & Hans-Kristian Hernes. *Green States and Social Movements: Environmentalism in the United States, United Kingdom, Germany & Norway* (Oxford: Oxford University Press, 2011).

Edwards, Gemma. *Social Movements and Protest* (Cambridge: Cambridge University Press, 2014).

Evans, David. A History of Nature Conservation in Britain (London: Routledge, 1992).

Fiske, John. 'Moments of television: Neither the text nor the audience', in *Remote Control: Television Audiences and Cultural Power*, edited by Ellen Seiter, Hans Borchers, Gabriele Kreutzner & Eva-Maria Warth (Oxford: Routledge, 2013), pp. 56-78.

Flyvbjerg, Bent. 'Case Study', in *The SAGE Handbook of Qualitative Research*, edited by Norman K. Denzin & Yvonna S. Lincoln (London: SAGE Publications, 2011), pp. 301-316.

Freedman, Bill. *Environmental Ecology: The Ecological Effects of Pollution, Disturbance, and Other Stresses* (London: Academic Press Limited, 1995).

Frost, John E. 'Case Study on Cow Green Controversy', *Proceedings of the Symposium on Social and Economic Aspects of Water Resources Development*, 9 (1971), pp. 97-100.

Gibson, Timothy A. 'NIMBY and the Civic Good', *City & Community*, 4:4 (2005), pp. 381-401.

Godwin, Harry. 'Sir Arthur Tansley: The Man and the Subject - The Tansley Lecture, 1976', *Journal of Ecology*, 65:1 (1977), pp. 1-26.

Goodwin, Jeff & James M. Jasper, 'Editors' Introduction', in *The Social Movement Reader: Class and Concepts*, edited by Jeff Goodwin & James M. Jasper (Oxford: Blackwell Publishers, 2003), pp. 3-7.

Goodwin, Jeff & James M. Jasper (eds). *The Social Movement Reader: Class and Concepts* (Oxford: Blackwell Publishers, 2003).

Gould, Peter C. Early Green Politics: Back to Nature, Back to the Land, & Socialism in Britain, 1880-1900 (Sussex: Harvester Press, 1988).

Gottlieb, Robert. *Environmentalism Unbound: Exploring New Pathways for Change* (Cambridge, Mass.: MIT Press, 2001).

Gottlieb, Robert. Forcing the Spring: The Transformation of the American Environmental Movement (Washington DC: Island Press, 2005).

Gottlieb, Robert, Regina Freer & Mark Vallianatos. *The Next Los Angeles: The Struggle for a Liveable City* (Berkeley: University of California Press, 2005).

Gottlieb, Robert. Reinventing Los Angeles: Nature and Community in the Global City (Cambridge, Mass.: MIT Press, 2007).

Grant, Wyn. *Pressure Groups, Politics and Democracy in Britain* (London: Harvester Wheatsheaf, 1995).

Gregory, Roy. *The Price of Amenity: Five Studies in Conservation and Government* (London: Macmillan, 1971).

Grove-White, Robin. 'The Rise of the Environmental Movement, 1970-1990', in *Nature, Landscape and People Since the Second World War*, edited by T.C. Smout (East Lothian, Scotland: Tuckwell Press, 2001), pp. 44-51.

Guha, Ramachandra. *Environmentalism: A Global History* (London: Longman, 2000).

Hall, Stuart. 'Encoding and Decoding in the Television Discourse', *Centre for Contemporary Cultural Studies – Media Series No. 7*, September 1975, pp. 1-19.

Halliday, Stephen. The Great Stink of London: Sir Joseph Bazalgette and the Cleansing of the Victorian Capital (Stroud: Sutton, 2001).

Hamel, Jacques, Stéphane Dufour & Dominic Fortin. Case Study Methods (London: SAGE Publications, 1993).

Hanf, Kenneth & Alf-Inge Jansen. 'Environmental policy – the outcome of strategic action and institutional characteristics', in *Governance and Environment in Western Europe: Politics, Policy and Administration*, edited by Kenneth Hanf & Alf-Inge Jansen (Harlow, Essex: Longman, 1998), pp. 1-16.

Hanf, Kenneth & Alf-Inge Jansen (eds). Governance and Environment in Western Europe: Politics, Policy and Administration (Harlow, Essex: Longman, 1998).

Harju-Autti, P. 'Measuring Environmental Awareness in Nineteen States in India', *University Journal of Environmental Research and Technology*, 3:5 (2013), pp. 544-554.

Hazlett, Maril. "Women vs. Men vs. Bugs": Gender & Popular Ecology in Early Reactions to *Silent Spring*', *Environmental History*, 9:4 (2004), pp. 701-729.

Herring, Horace. 'The Conservation Society: Harbinger of the 1970s Environmental Movement in the UK', *Environment and History*, 7:4 (2001), pp. 381-401.

Hilton, Matthew. Consumerism in 20th Century Britain (Cambridge: Cambridge University Press, 2003).

Horrie, Chris. *Tabloid Nation: From the Birth of the Daily Mirror to the Death of the Tabloid* (London: André Deutsch, 2003).

Hussey, Stephen & Paul Thompson (eds). *Environmental Consciousness: The Roots of a New Political Agenda* (London: Transaction Publishers, 2000).

Jackson, Mark (ed.). Health and the Modern Home (London: Routledge, 2007).

Jameson, Connor Mark. Silent Spring Revisited (London: Bloomsbury, 2012).

Jones, Bryn. 'All Along the Watershed: Sixties Values as Defence of Community Lifeworlds in Britain 1968-2008', in *Sixties Radicalism and Social Movement Activism: Retreat or Resurgence?*, edited by Bryn Jones & Mike O'Donnell (London: Anthem Press, 2010), pp. 3-21.

Jones, Bryn & Mike O'Donnell (eds). Sixties Radicalism and Social Movement Activism: Retreat or Resurgence? (London: Anthem Press, 2010).

Jongman, R.H.G. 'Nature conservation planning in Europe: developing ecological networks', *Landscape & Urban Planning*, 32 (1995), pp. 169-183.

Jordan, Grant & William Maloney. *The Protest Business? Mobilising Campaign Groups* (Manchester: Manchester University Press, 1997).

Jorgensen, Dolly. 'A Blueprint for destruction: eco-activism in *Doctor Who* during the 1970s', *Ecozona*, 3:2 (2012), pp. 11-26.

Kimber, Richard & J.J. Richardson (eds). *Campaigning for the Environment* (London: Routledge & Kegan Paul, 1974).

Kimber, Richard & J.J. Richardson. 'Conclusion: tactics and strategies', in *Campaigning for the environment*, edited by Richard Kimber & J.J. Richardson (London: Routledge & Kegan Paul, 1974), pp. 212-225.

Kimber, Richard & J.J. Richardson. 'Introduction', in *Pressure Groups in Britain: A Reader*, edited by Richard Kimber & J.J. Richardson (London: J.M. Dent & Sons, Ltd, 1974), pp. 1-22.

Kimber, Richard & J.J. Richardson (eds). *Pressure Groups in Britain: A Reader* (London: J.M. Dent & Sons, Ltd, 1974).

Kimber, Richard, J.J. Richardson & S.K. Brooks, 'The Juggernauts: public opposition to heavy lorries', in *Campaigning for the Environment*, edited by Richard Kimber & J.J. Richardson (London: Routledge & Kegan Paul, 1974), pp. 136-164.

Kitchin, Rob & James Kneale. 'Science fiction or future fact? Exploring imaginative geographies of the new millennium', *Progress in Human Geography*, 25:1 (2001), pp. 19-35.

Van Koppen, C.S.A. (Kris) & William T. Markham (eds). *Protecting Nature:* Organisations and Networks in Europe and the USA (Cheltenham: Edward Elgar Publishers, 2007).

Lamb, Robert. *Promising the Earth* (London: Routledge, 1996).

Latham, Robert. 'Biotic Invasions: Ecological Imperialism in New Wave Science Fiction', *The Yearbook of English Studies*, 37:2, Science Fiction (2007), pp. 103-119.

Latham, Robert. 'New Worlds and the New Wave in Fandom: Fan Culture and the Reshaping of Science Fiction in the Sixties', *Extrapolation*, 47:2 (2006), pp. 296-315.

Lear, Linda. Rachel Carson: Witness to Nature (London: Macmillan, 1997).

Lent, Adam. *British Social Movements Since 1945: Sex, Colour, Power and Peace* (Basingstoke: Palgrave Macmillan, 2001).

Lewis, Chris H. 'Ehrlich, Paul', in *Conservation and Environmentalism: An Encyclopaedia*, edited by Robert Paehlke (London: Routledge, 1995), p. 207.

Linnér, Björn-Ola. *The Return of Malthus: Environmentalism and Post War Population-Resource Crisis* (Isle of Harris: White Horse Press, 2003).

Lowe, P.D. 'Amenity and equity: a review of local environmental pressure groups in Britain', *Environment and Planning A*, 9:1 (1977), pp. 35-58.

Lowe, Philip & Jane Goyder. *Environmental Groups in Politics* (London: George Allen & Unwin, 1983).

Lowe, Rodney. *The Welfare State in Britain Since 1945* (Basingstoke: Palgrave Macmillan, 2005), Third Edition.

Lutts, Ralph H. 'Chemical Fallout: Rachel Carson's *Silent Spring*, Radioactive Fallout & the Environmental Movement', *Environmental Review*, 9:3 (1985), pp. 210-225.

McClymont, Katie & Paul O'Hare. "We're not NIMBYs!" Contrasting local protest groups with idealised conceptions of sustainable communities', *Local Environment*, 13:4 (2008), pp. 321-335.

McCormick, John. *The Global Environmental Movement: Reclaiming Paradise* (London: Belhaven Press, 1989).

MacKay, James and Matthew Hilton. 'Introduction', in *NGOs in Contemporary Britain: Non-state Actors in Society and Politics Since 1945*, edited by Nick Crowson, Matthew Hilton and James MacKay (Basingstoke, Hampshire: Palgrave Macmillan, 2009), pp. 1-20.

MacKenzie, Debora. 'Doomsday Book', *New Scientist*, 7 January 2012, No. 2846, pp. 38-41.

MacKenzie, John M. *The Empire of Nature: Hunting, Conservation and British Imperialism* (Manchester: Manchester University Press, 1988).

MacNaghten, Phil & John Urry. *Contested Natures* (London: Sage Publications Ltd, 1998).

McNeill, John. Something New Under the Sun: An Environmental History of the Twentieth Century (London: Penguin, 2001).

Markham, William T. & C.S.A. (Kris) van Koppen, 'Nature protection in nine countries: a framework for analysis', in *Protecting Nature: Organisations and Networks in Europe and the USA*, edited by C.S.A. (Kris) van Koppen & William T. Markham (Cheltenham: Edward Elgar Publishers, 2007), pp. 1-33.

Massard-Guilbaud, Geneviève & Stephen Mosley. 'Breaking Down Borders: Integrating the Social and Environmental in History', in *Common Ground: Integrating the Social and Environmental in History*, edited by Geneviève Massard-Guilbaud & Stephen Mosley (Newcastle upon Tyne: Cambridge Scholars, 2011), pp. 1-15.

Massard-Guilbaud, Geneviève & Stephen Mosley (eds). *Common Ground: Integrating the Social and Environmental in History* (Newcastle upon Tyne: Cambridge Scholars, 2011).

Meehan, Elizabeth. 'British feminism from the 1960s to the 1980s', in *British Feminism in the Twentieth Century*, edited by Harold L. Smith (Amherst: The University of Massachusetts Press, 1990), pp. 189-204.

Mills, Catherine. 'Coal, Clean Air, and the Regulation of the Domestic Hearth in Post-War Britain', in *Health and the Modern Home*, edited by Mark Jackson (London: Routledge, 2007), pp. 224-243.

Mitman, Gregg. Reel Nation: America's Romance with Wildlife on Film (London: Harvard University Press, 1999).

Morley, David. 'Changing paradigms in audience studies', in *Remote Control: Television Audiences and Cultural Power*, edited by Ellen Seiter, Hans Borchers, Gabriele Kreutzner & Eva-Maria Warth (Oxford: Routledge, 2013), pp. 16-43.

Mosley, Stephen. "A Network of Trust": Measuring and Monitoring Air Pollution in British Cities, 1912-1960', *Environment and History*, 15:3 (2009), pp. 273-302.

Nehring, Holger. 'The Growth of Social Movements', in *A Companion to Contemporary Britain, 1939-2000*, edited by Paul Addison & Harriet Jones (Oxford: Blackwell Publishing, 2005), pp. 389-406.

Nicholson, Max. *The New Environmental Age* (Cambridge: Cambridge University Press, 1987).

O'Riordan, Timothy. 'Public Interest Environmental Groups in the United States and Britain', *Journal of American Studies*, 13:3 (1979), pp. 409-438.

O'Sullivan, Paddy. 'The Ending of the Journey: William Morris, *News from Nowhere* & Ecology', in *William Morris* & *News from Nowhere: A Vision for Our Time*, edited by Stephen Coleman & Paddy O'Sullivan (Devon: Green Books, 1990), pp. 169-183.

Paehlke, Robert (ed.). *Conservation and Environmentalism: An Encyclopaedia* (London: Routledge, 1995).

Paehlke, Robert. 'Economic Growth and the Environment', in *Conservation and Environmentalism: An Encyclopaedia*, edited by Robert Paehlke (London: Routledge, 1995), pp. 199-200.

Paehlke, Robert. 'Environmentalism', in *Conservation and Environmentalism: An Encyclopaedia*, edited by Robert Paehlke (London: Routledge, 1995), pp. 260-261.

Park, Chris C. *History of the Conservation Movement in Britain* (Reading: The Conservation Trust, 1976).

Parker, Gavin & Neil Ravenscroft. 'Benevolence, nationalism and hegemony: fifty years of the National Parks and Access to the Countryside Act 1949', *Leisure Studies*, 18:4 (1999), pp. 297-313.

Pepper, David. *Modern Environmentalism: An Introduction* (London: Routledge, 1996).

Pepper, David. *The Roots of Modern Environmentalism* (London: Croom Helm, 1984).

Perks, Robert & Alistair Thomson, 'Introduction', in *The Oral History Reader*, edited by Robert Perks and Alistair Thomson (London: Routledge, 1998), pp. ix-xiii.

Perks, Robert & Alistair Thomson (eds). *The Oral History Reader* (London: Routledge, 1998).

Peterson, David del Mar. Environmentalism (London: Pearson, 2006).

Portelli, Alessandro. 'What makes oral history different', in *The Oral History Reader*, edited by Robert Perks and Alistair Thomson (London: Routledge, 1998), pp. 63-74.

Price, Jenny. 'Stop Saving the Planet! – and Other Tips via Rachel Carson for Twenty-First Century Environmentalists', in 'Rachel Carson's *Silent Spring*: Encounters and Legacies', edited by Lawrence Culver, Christof Mauch & Katie Ritson, *RCC Perspectives*, 2012, Issue 7, pp. 11-30.

Pugh, Martin. 'Domesticity and the decline of feminism, 1930-1950', in *British Feminism in the Twentieth Century*, edited by Harold L. Smith (Amherst: The University of Massachusetts Press, 1990), pp. 144-164.

Rawcliffe, Peter. *Environmental Pressure Groups in Transition* (Manchester: Manchester University Press, 1998).

Redclift, Michael & Graham Woodgate (eds). *The International Handbook of Environmental Sociology* (Cheltenham: Edward Elgar Publishers, 1997).

Richardson, David M. & Petr Pyšek. 'Fifty years of invasion ecology: The legacy of Charles Elton', *Diversity and Diversions: A Journal of Conservation Biogeography*, 14: 2 (2008), pp. 161-168.

Ritvo, Harriet. *The Dawn of Green: Manchester, Thirlmere & Modern Environmentalism* (London: University of Chicago Press, 2009).

Rome, Adam. "Give Earth a Chance": The Environmental Movement and the Sixties', *Journal of American History*, 90:4 (2003), pp. 525-554.

Rootes, Christopher. 'Britain', in *Environmental Protest in Western Europe*, edited by Christopher Rootes (Oxford: Oxford University Press, 2003), pp. 20-58.

Rootes, Christopher. 'Environmental movement and green parties in western and eastern Europe', in *The International Handbook of Environmental Sociology*, edited by in Michael Redclift & Graham Woodgate (Cheltenham: Edward Elgar Publishers, 1997), pp. 319-348.

Rootes, Christopher. 'Environmental Movements', in *The Blackwell Companion to Social Movements*, edited by David A. Snow, Sarah A. Soule & Hanspeter Kriesi (Oxford: Blackwell Publishing, 2004), pp. 608-640.

Rootes, Christopher. 'Environmental Movements: From the Local to the Global', *Environmental Politics*, 8:1 (1999), pp. 1-12.

Rootes, Christopher. 'Environmental NGOs and the Environmental Movement in England', in *NGOs in Contemporary Britain: Non-State Actors in Society and Politics since 1945*, edited by Nick Crowson, Matthew Hilton & James MacKay (Basingstoke, Hampshire: Palgrave Macmillan, 2009), pp. 201-221.

Rootes, Christopher (ed.). *Environmental Protest in Western Europe* (Oxford: Oxford University Press, 2003).

Rootes, Christopher. 'From local conflict to national issue: when and how environmental campaigns succeed in transcending the local', *Environmental Politics*, 22:1 (2013), pp. 95-114.

Rootes, Christopher. 'Introduction', in *Environmental Protest in Western Europe*, edited by Christopher Rootes (Oxford: Oxford University Press, 2003), pp. 1-19.

Rootes, Christopher. 'Nature protection organisations in England', in *Protecting Nature: Organisations and Networks in Europe and the USA*, edited by C.S.A. (Kris) van Koppen & William T. Markham (Cheltenham: Edward Elgar Publishers, 2007), pp. 34-62.

Rüdig, Wolfgang. 'Between Moderation and Marginalisation: Environmental Radicalism in Britain', in *Ecological Resistance Movements: The Global Emergence of Radical and Popular Environmentalism*, edited by Bron Raymond Taylor (New York: State University of New York Press, 1995), pp. 219-240.

Rüdig, Wolfgang & Philip D. Lowe. 'The Withered "Greening" of British Politics: a study of the Ecology Party', *Political Studies*, 34:2 (1986), pp. 262-284.

Sandbrook, Dominic. Never Had it So Good: A History of Britain from Suez to the Beatles (London: Little, Brown, 2005).

Sandbrook, Dominic. White Heat: A History of Britain in the Swinging Sixties (London: Little, Brown, 2006).

Sands, Tim. Wildlife in Trust: A Hundred Years of Nature Conservation (London: Elliot and Thompson Limited, 2012).

Schwarzenbach, Alexis. Saving the World's Wildlife: The WWF's First Fifty Years (London: Profile Books, 2011).

Seiter, Ellen, Hans Borchers, Gabriele Kreutzner & Eva-Maria Warth (eds). *Remote Control: Television, Audiences and Cultural Power* (Oxford: Routledge, 2013).

Seiter, Ellen. *Television and New Media Audiences* (Oxford: Oxford University Press, 1999).

Sheail, John. *An Environmental History of Twentieth Century Britain* (London: Palgrave, 2002).

Sheail, John. *Nature Conservation in Britain: The Formative Years* (London: The Stationary Office, 1998).

Sheail, John. *Nature in Trust: A History of Nature Conservation in Britain* (London: Blackie, 1976).

Sheail, John. "Never Again": Pollution and the Management of Watercourses in Post-War Britain', *Journal of Contemporary History*, 33:1 (1998), pp. 117-134.

Sheail, John. *Pesticides and Nature Conservation in Britain, 1950-1975* (Oxford: Oxford University Press, 1985).

Sheail, John. Seventy-five years in Ecology: The British Ecological Society (London: Blackwell Scientific Publications, 1987).

Sheail, John. '*Torrey Canyon*: The Political Dimension', *Journal of Contemporary History*, 42:3 (2007), pp. 485-504.

Simmons, I.G. *An Environmental History of Great Britain: From 10,000 Years Ago to the Present* (Edinburgh: Edinburgh University Press, 2001).

Simpson, David. Pressure Groups (London: Hodder & Stoughton, 1999).

Smith, Harold L. (ed.). *British Feminism in the Twentieth Century* (Amherst: The University of Massachusetts Press, 1990).

Smout, T.C. *Exploring Environmental History: Selected Essays* (Edinburgh: Edinburgh University Press, 2011).

Snow, David A., Sarah A. Soule & Hanspeter Kriesi (eds). *The Blackwell Companion to Social Movements* (Oxford: Blackwell Publishing, 2004).

Solnit, Rebecca. 'Three Who Made a Revolution', *The Nation*, 16 March 2003.

Steel, Benjamin, Matthew Paterson & Brian Doherty (eds). *Direct Action in British Environmentalism* (London: Routledge, 2000).

Stewart, J.D. 'British Pressure Groups: Conclusions', in *Pressure Groups in Britain: A Reader*, edited by Richard Kimber & J.J. Richardson (London: J.M. Dent & Sons, Ltd, 1974), pp. 289-295.

Stone, Richard. 'Counting the cost of London's killer smog (air pollution)', *Science*, 298:5601 (13 December 2002), pp. 2106-2107.

Steyn, Phia & André Wessels. 'Environmental Non-Governmental contributions to the Global Environmental Movement, 1962-1992', *Journal for Contemporary History*, 24:2 (December 1999), pp. 96-113.

Sussman, Glenn & Bryon W. Daynes. 'Spanning the Century: Theodore Roosevelt, Franklin Roosevelt, Richard Nixon, Bill Clinton, and the Environment', in *White House Studies Compendium, Volume 4*, edited by Robert W. Watson (New York: Nova Science Publishers, Inc.), pp. 301-318.

Taylor, Bron Raymond (ed.). *Ecological Resistance Movements: The Global Emergence of Radical and Popular Environmentalism* (New York: State University of New York Press, 1995).

Taylor, Nigel. *Urban Planning Theory Since 1945* (London: SAGE Publications, 1999).

Thompson, Paul. 'The English, the trees, the wild and the green: Two millennia of mythological metamorphoses', in *Environmental Consciousness: The Roots of a New Political Agenda*, edited by Stephen Hussey & Paul Thompson (London: Transaction Publishers, 2000), pp. 20-54.

Thompson, Paul. *The Voice of the Past: Oral History* (Oxford: Oxford University Press, 1978).

Tilly, Charles. *From Mobilisation to Revolution* (London: McGraw-Hill Publishing Company, 1978).

Tilly, Charles & Lesley J. Wood. *Social Movements: 1768-2008* (Boulder, Colorado: Paradigm Publishers, 2009), Second Edition.

Tulloch John & Henry Jenkins (eds). Science Fiction Audiences: Watching Doctor Who and Star Trek (London: Routledge, 1995).

Tulloch, John. "Throwing a little bit of poison into future generations": *Doctor Who* audiences and ideology, in *Science Fiction Audiences: Watching Doctor Who and Star Trek*, edited by John Tulloch & Henry Jenkins (London: Routledge, 1995), pp. 67-85.

Turner, Alwyn W. *Crisis? What Crisis? Britain in the 1970s* (London: Aurum, 2008).

Veldman, Meredith. Fantasy, the Bomb and the Greening of Britain: Romantic Protest, 1945-1980 (Cambridge: Cambridge University Press, 1994).

Walker, Martin J. 'The Unquiet Voice of *Silent Spring*: The Legacy of Rachel Carson', *The Ecologist*, 29:5 (1999), pp. 322-325.

Wall, Derek. 'Snowballs, elves and skimmingtons?: Genealogies of environmental direct action', in *Direct Action in British Environmentalism*, edited by Benjamin Steel, Matthew Paterson & Brian Doherty (London: Routledge, 2000), pp. 79-92.

Walshe, Tom, Colin Bevan, Ruth Sealy & Naomi Phillipson. *A Knight on the Box:* 40 Years of Anglia Television (Norwich: Anglia Television Limited, 1999).

Ward, Paul. Britishness since 1870 (London: Routledge, 2004).

Watson, Robert W. (ed.). White House Studies Compendium, Volume 4 (New York: Nova Science Publishers, Inc.).

Watts, Duncan. *The Environment and British Politics* (London: Hodder & Stoughton, 1999).

Watts, Duncan. *Pressure Groups* (Edinburgh: Edinburgh University Press, 2007).

Weston, Joe. *The F.O.E. Experience: The Development of an Environmental Pressure Group* (Oxford: Oxford Polytechnic, 1989).

Wheeler, Michael (ed.). Ruskin and Environment: The Storm-Cloud of the Nineteenth Century (Manchester: Manchester University Press, 1995).

Whelehan, Imelda. *Modern Feminist Thought: From the Second Wave to 'Post-Feminism'* (Edinburgh: Edinburgh University Press, 1999).

Whited, Tamara L., Jens I. Engels, Richard C. Hoffman, Hilde Ibsen & Wybren Verstegen. *Northern Europe: An Environmental History* (Oxford: ABC-CLIO, 2005).

Wilkinson, Paul. Social Movements (London: Pall Mall, 1971).

Wilkinson, Peter & Schofield, Julia. *WARRIOR: One Man's Environmental Crusade* (Cambridge: the Lutterworth Press, 1994).

Williams, Jack. *Entertaining the Nation: A Social History of British Television* (Stroud: Sutton Publishing Limited, 2004).

Winner, Langdon. The Whale and the Reactor: A Search for Limits in an Age of High Technology (London: University of Chicago Press, 1986).

Winter, James. Secure from Rash Assault: Sustaining the Victorian Environment (Berkeley: University of California Press, 1999).

Wolf, Susan & Neil Stanley. *Wolf and Stanley on Environment Law* (Oxford: Routledge, 2011), Fifth Edition.

Yin, Robert K. Case Study Research: Design and Methods (London: SAGE, 2009), Fourth Edition.

Conference Papers

Lear, Linda. 'Rumblings of an Avalanche: The Legacy of *Silent Spring*', Invited Lecture, McGill University, Montreal, Canada, 18 September 2012. I am grateful for Dr Lear's permission to quote from her lecture.

Newspapers

Daily Express; Daily Mirror, Daily Telegraph; Sunday Express; The Cornishman; The Guardian; The Huffington Post, The Independent; The Observer, The New York Times: The Times: The West Briton.

Oxford Dictionary of National Biography (Online Edition)

Lady Evelyn Barbara Balfour; (Ida) Phyllis Barclay-Smith; Charles Sutherland Elton; Sir Julian Sorell Huxley; (Edward) Max Nicholson; William Harold Pearsall; Sir Peter Markham Scott.

Television Programmes

Africa (BBC); Attenborough: 60 Years in the Wild (BBC); Doctor Who (BBC) – 'Planet of Giants' 1964, 'The Green Death' 1973, 'Invasion of the Dinosaurs' 1974, 'Doctor Who Live: The Next Doctor' 2013; Doomwatch (BBC).

Unpublished PhD Theses

Davies, Gail. Networks of Nature: Stories of Natural History Film-Making from the BBC, PhD Thesis, University College London (1998).

Law, Penelope Jane. *The Long-Run Development of Environmental Interest Groups in Great Britain: two case studies*, PhD Thesis, London School of Economics and Political Science (2000).

Websites

Chapter 1:

Harold Wilson's 1969 Conference speech, Brighton, was taken from 'British Political Speech', http://www.britishpoliticalspeech.org/speech-archive.htm?speech=167 – accessed electronically 10 January 2012.

Chapter 2:

BirdLife International:

<u>http://www.birdlife.org/datazone/speciesfactsheet.php?id=6263</u> – accessed electronically 2 December 2013.

British Transport Films, *I Am a Litter Basket* (1959), British Film Institute, 9 minutes – https://www.bfi.org.uk/inview/title/6443 – accessed electronically 6 November 2013.

Clear World Media, '#GreatSmog Post Mortem' – http://www.clearworldmedia.com/post/37623921552/greatsmog-post-mortem – accessed electronically 27 May 2013.

Great Pacific Garbage Patch see the National Geographic's webpages: http://education.nationalgeographic.co.uk/education/encyclopedia/great-pacific-garbage-patch/?ar_a=1 – accessed electronically 3 February 2014.

IUCN Vision and Mission – http://www.iucn.org/about/ – accessed electronically 11 August 2013.

'Keep Britain Tidy'- http://www.keepbritaintidy.org/ourhistory/607 - accessed electronically 3 July 2013.

McGahan, Katy. Curator (Non-Fiction), British Film Institute – http://www.bfi.org.uk/inview/title/6397 – (this can only be accessed through an academic subscription) accessed electronically 12 August 2013.

Mosley, Stephen. 'Air pollution: The impact of the 1956 Clean Air Act', 14 January 2014 – https://www.foe.co.uk/blog/air-pollution-impact-1956-clean-air-act – accessed electronically 3 April 2014.

'Peter Scott: Woodpeckers' – http://www.wildfilmhistory.org/film/272/Peter+Scott%3A+Woodpeckers.html – accessed electronically 8 November 2013.

Royal Commission on Environmental Pollution – http://webarchive.nationalarchives.gov.uk/20060820083451/http://rcep.org.uk/about.htm#1 – accessed electronically 7 February 2014.

Russell, Patrick. Senior Curator (Non-Fiction), British Film Institute – http://www.bfi.org.uk/inview/title/6460 – (this can only be accessed through an academic subscription) accessed electronically 12 August 2013.

Sheffield City Council has produced a guide to their sources on Clean Air: 'Sources for the Study of Sheffield's Battle for Clean Air' (this is available via a pdf or Word document) – https://www.sheffield.gov.uk/libraries/archives-and-local-studies/research-guides/Clean-Air.html – accessed electronically 25 July 2013.

The National Archives explains how the BBC compiled audience research reports – http://www.nationalarchives.gov.uk/nra/onlinelists/GB%200898%20R9.pdf – accessed electronically 25 July 2013.

'The Victorian Dictionary' (entry 'fog' under the chapter on "weather") – http://www.victorianlondon.org/index-2012.htm – accessed electronically 2 November 2012.

Wildfowl and Wetland Trust – http://www.wwt.org.uk/about-us/history-of-wwt/our-founder-sir-peter-scott/ – accessed electronically 8 November 2013.

Chapter 3:

Discover Magazine's '25 Greatest Science Books of All Time' – http://discovermagazine.com/2006/dec/25-greatest-science-books/ – accessed electronically 23 July, 2012.

Ehrlich, Paul. 'Silencing the Spring', *ABC Environment*, 2 July 2012 – http://www.abc.net.au/environment/articles/2012/07/02/3535901.htm – accessed electronically 13 October 2012.

History of NERC – http://www.nerc.ac.uk/about/work/history.asp – accessed electronically 22 January 2014.

'Morges Manifesto' – http://assets.panda.org/downloads/morgesmanifesto.pdf – accessed electronically 14 November 2013.

National Review's list of 'The 100 best non-fiction books of the century' – <a href="http://www.listsofbests.com/list/10362-national-review-s-100-best-non-fiction-books-of-the-20th-century?page=2 – accessed electronically 23 July 2012. See also http://old.nationalreview.com/100best/100 books.html – accessed electronically 23 July 2012.

'Planet of Giants' synopsis – http://www.bbc.co.uk/doctorwho/classic/episodeguide/planetofgiants/ – accessed electronically 25 October 2013.

Random House's modern library list of the top 100 twentieth-century non-fiction – http://www.randomhouse.com/modernlibrary/100bestnonfiction.html – http://www.randomhouse.com/modernlibrary/100bestnonfiction.html – accessed electronically 23 July, 2012.

SOS: Rhino – http://www.wildfilmhistory.org/film/86/S.O.S.+Rhino.html – accessed electronically 8 November 2013.

The Guardian journalist John Harris met with Jenny Jones, amongst other candidates standing in the Camberwell and Peckham ward in the 2010 general election –

http://www.theguardian.com/commentisfree/video/2010/may/05/camberwell-peckham-workers-revolutionary-party – accessed electronically 12 August 2013.

The Living Pattern – http://explore.bfi.org.uk/4ce2b69ec397e – accessed electronically 15 August 2013.

'The London Scene', 1961 – http://www.wildfilmhistory.org/film/84/84.html?filmid=84 – accessed electronically 8 November 2013.

'The Making of the Soil', 1952 – https://www.bfi.org.uk/inview/title/6387 – accessed electronically 5 November 2013.

Chapter 4:

'Doomwatch' – http://www.doomwatch.org/ – accessed electronically 20 February 2014.

Richard Petrow – http://library.syr.edu/digital/guides/p/petrow_r.htm – accessed electronically 28 August 2013.

Mark Stoll's online exhibition on *Silent Spring* – http://www.environmentandsociety.org/exhibitions/silent-spring/silent-spring-exhibition-overview – accessed electronically 21 November 2012.

The Family Planning Association history factsheet – http://www.fpa.org.uk/factsheets/history-family-planning-services – accessed electronically 5 February 2014.

Chapter 5:

Doctor Who scripts – http://www.chakoteya.net/doctorwho/11-2.htm for transcripts of all Doctor Who episodes – accessed electronically 1 November 2012.

Declaration of the UN Conference on the Human Environment – http://www.unep.org/Documents.Multilingual/Default.asp?documentid=97&articleid=1503 – accessed electronically 23 October 2012.

'Green History' – http://another-green-world.blogspot.co.uk/2006/10/green-party-hist-ch1-pt-2.html – accessed electronically 2 January 2013.

'Global Green Party History – Chronology 1973' – http://www.globalgreens.org/history/chronology/1973 – accessed electronically 2 January 2013.

Günther Handl, 'Declaration of the UN Conference on the Human Environment' – http://untreaty.un.org/cod/avl/ha/dunche/dunche.html – accessed electronically 23 October 2012.

'Invasion of the Dinosaurs', synopsis – http://www.bbc.co.uk/doctorwho/classic/episodeguide/invasiondinosaurs/detail.sht ml – accessed electronically 19 October 2012.

Oxford English Dictionary entry for 'Doomwatch' – http://www.oed.com/view/Entry/56817?redirectedFrom=Doomwatch#eid – accessed electronically 12 July 2012.

Report of UN Conference on the Human Environment – http://www.unep.org/Documents.Multilingual/Default.asp?DocumentID=97 – accessed electronically 23 October 2012.

'Stopping the Spadina Expressway: A Triumph that shaped Toronto' – http://ebw.evergreen.ca/move/feat/stopping-the-spadina-expressway-winning-one-for-torontos-neighbourhoods – accessed electronically 17 January 2013.

'The Green Death' synopsis – http://www.bbc.co.uk/doctorwho/classic/episodeguide/greendeath/detail.shtml – accessed electronically 12 October 2012.

The Geological Museum – http://www.nhm.ac.uk/visit-us/history-architecture/geological-museum/index.html – accessed electronically 25 March 2014.

The Toronto campaign, Stop Spadina Campaign – http://www.pps.org/reference/jjacobs-2/ – accessed electronically 17 January 2013.

Chapter 6:

Lowe, Philip, Jonathan Murdoch & Andrew Norton. *Professionals and Volunteers in the Environmental Process* (2001) – http://www.ncl.ac.uk/cre/publish/Books/CPREfinal.pdf – accessed electronically 24 January 2014.

Wall, Derek. 'Darker Shades of Green', *Red Pepper*, August 2000 – http://www.redpepper.org.uk/darker-shades-of-green/ – accessed electronically 21 February 2014.